

ANNUAL REPORT 2015 2016

August 2015 – July 2016



Dhirubhai Ambani
Institute of Information and Communication Technology

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Shri. Dhirubhai Hirachand Ambani

(28th December, 1932 – 6th July, 2002)

Founder Chairman, Reliance Group
Founder Chairman, DA-IICT





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Board of Governors



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Shri Pankaj Joshi	Principal Secretary, Department of Higher and Technical Education, Government of Gujarat, Gandhinagar
Shri Dhananjay Dwivedi	Secretary, Department of Science and Technology, Government of Gujarat, Gandhinagar
Shri Suresh Rangachar	Dhirubhai Ambani Institute of Information and Communication Technology Society, Mumbai
Shri Dharmendra Bhandari	Dhirubhai Ambani Institute of Information and Communication Technology Society, Mumbai
Shri Manikantan Iyer	Reliance Communications Limited, Mumbai
Shri N. K. Mangla	Reliance Communications Limited, Mumbai
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Shri Shrenik Vaishnav	Reliance Communications Limited, Mumbai
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Prof. Anish Mathuria	Dean (Research & Development), DA-IICT, Gandhinagar

Secretary

Shri Soman Nair Executive Registrar, DA-IICT, Gandhinagar



Director's Page



This report covering the academic year 2015-16 is a notable one. The period marks the first year of implementation of the Institute's Strategic Plan 2015-16, the preparation of which involved all the stakeholders. The launching of the Plan began in the middle of the year in a modest way touching upon the planned renovation and up-gradation of campus buildings, strengthening the ICT infrastructure, academic rigour, human resources and external connect and collaborations aiming at developing a distinct research culture among the faculty and students and enhancing the quality and profile of our graduates.

DA-IICT continued to receive research projects and sponsorship for research conferences and workshops, trainings from the Central and State Governments. The faculty and students research and publications have shown an all-round rise. The Institute attracted the top ranking students to its teaching programs. The Institute has created a niche by conducting a course on Neural Networks for BTech and MTech students with faculty from Nanyang Technical University, Singapore.

I am indebted for the guidance and support I have received from Reliance ADA Group, Board of Governors, faculty and staff in managing the affairs of the Institute. As we move forwards with our Strategic Plan, we are well placed to achieve the vision of our founders as an Institute of innovation and excellence.

R. Nagaraj
Director

About the Institute

THE INSTITUTE

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar was founded in 2001 by the legendary visionary, Shri Dhirubhai Hirachand Ambani with a vision 'to help build a knowledge-led society founded on intellectual competitiveness for global leadership.' Set up as a Society under the Societies Registration Act, 1850 and Bombay Public Trust Act, 1950, an Act of the Gujarat State Legislature conferred upon DA-IICT the status of a University in 2003. The University Grants Commission (UGC) has included DA-IICT in the list of Universities maintained by the UGC under Section 2(f) of the UGC Act, 1956. DA-IICT became a member of the Association of Indian Universities (AIU) in 2009. DA-IICT is managed by a Board of Governors chaired by Shri Anil Ambani, Chairman, Reliance ADA Group with visionaries and leaders from academia, industry and government as its members.

DA-IICT launched its first undergraduate program, BTech (Information and Communication Technology) -- the first of its kind in India in 2002. In 2013, the second undergraduate program -- BTech (Hons.) in ICT with Computational Science as minor was designed and offered. Besides these undergraduate programs, DA-IICT offers five postgraduate programs including a doctoral program. These programs are designed to develop students' comprehension of technology both within the broader vision of science and understanding of the business and social environment. DA-IICT have graduated over 4200 ICT engineers, design professionals, agriculture and rural development professionals and doctoral scholars since its inception and they occupy prominent positions in industry, civil society organizations and academia and also as successful entrepreneurs. The high-end continuing education programs in Information and Communication Technology and allied areas offered by DA-IICT have been recognized as appropriate training programs to upgrade the skills and competence of industry professionals, government officials and defence service men.

DA-IICT places great importance on recruiting highly qualified and research-oriented faculty. The faculty members have authored quality books and research articles that have been internationally recognized. They have attracted a large number of sponsored projects, including collaborative projects with academic institutions in UK, France, Spain and Japan, with funding from government bodies such as DST and DIT. The Institute also has research funding from industry for supporting PhD research scholars. The Institute houses a government supported Incubation Center to nurture and develop business ideas based on new technology.

At the invitation of the Government of Gujarat, DA-IICT is mentoring the new Indian Institute of Information Technology, Vadodara (IIIT-V) set up under Public-Private Partnership mode, which started admitting students from the academic year 2013-14.

The Institute has enviable state-of-art infrastructure to support teaching and research which includes well-stocked Library, Electronics and Digital Science Laboratories supported by an array of state of the computer studios with continuously upgraded hardware and software to aid learning and research. The other facilities are three lecture theatres – two with 350 and one with 250 seating capacities, classrooms and laboratories equipped with modern audio and video presentation systems and high speed internet connectivity. The spacious outdoor and indoor sports complexes, gymnasium, cultural, literary and other events enrich the students' life on the campus. The architecture of the campus buildings consisting of administrative complex, faculty block, furnished hostels with wireless internet connectivity, several food courts, dining halls and the landscape are such that the students living are contented.

DA-IICT is spread over 50 acres of land in Gandhinagar, Capital City of Gujarat. Eighty percent of land is open space reserved for green cover and



garden, making it an environment friendly campus. The campus houses around 1500 students.

In the short span of 16 years, DA-IICT has become a name synonymous with quality education and research in ICT domain and we are committed to provide the leadership role through constant innovation in programs, curriculum, and pedagogy.

GANDHINAGAR

Gandhinagar, the capital of Gujarat, lies on the west bank of the Sabarmati River, about 30 kilometres away from Ahmedabad. The city is divided into thirty sectors and each sector has its own civic and educational amenities. After setting up an Information Technology park (Info-City), DA-IICT was founded as the first node of the institutional concentration. The subsequent range of institutes are campuses of the Indian Institute of Technology, National Institute of Design, Pandit Deendayal Petroleum University, Central University of Gujarat, Gujarat Forensic Sciences University, Institute for Plasma Research, Entrepreneurship Development Institute, Gujarat National Law University and National Institute of Fashion Technology. Another emerging institution is

the Gujarat International Finance Tec-City (GIFT City) aimed to tap the potential of India's financial services by offering global firms a world class infrastructure and facilities. All these institutions are transforming Gandhinagar into a knowledge and financial services city. DA-IICT can be reached in about 30 minutes from Sardar Vallabhai Patel International Airport and the Central Railway Station, Ahmedabad.

CAMPUS

The DA-IICT campus is carefully planned and designed as an environmentally conscious campus. The entire design is oriented towards preserving the environment. The full green coverage on the campus with trees, lawns and bushes bearing green leaves and exotic flowers surrounding the buildings and pathways instills environment consciousness among students and enrich their learning. The campus also has a herb garden with species of rare medicinal plants. The landscape was planned and developed in a manner that no rainwater is lost. The irrigation for campus garden and lawns is carried out with recycled water. The campus is a haven for bird-watchers, with a variety of species of birds being spotted.



Academic Programs

DA-IICT offers two undergraduate programs and five post-graduate programs including a doctoral program. All the teaching programs are designed in consultation with the industry to ensure that their needs are met. The curricula of the programs are also reviewed and revised regularly considering the technological advancements and the industry requirements. DA-IICT also offers short term training

programs, research seminars and workshops under the Continuing Education Program (CEP). All the teaching programs are designed to develop skills and intellect that is in tune with the contemporary ICT needs of the industry, government, public sector and academia.

The details of the academic programs offered are given in the **Table 1**.

Table 1: Academic Programs

Sr. No.	Programs	Commencement	Duration (Years)	Annual Intake*
1	BTech (ICT)	2001	4	240
2	BTech (Honours) in ICT with minor in Computational Science	2013	4	60
3	MTech (ICT)	2002	2	65
4	MSc (Information Technology)	2002	2	120
5	MSc (ICT in Agriculture and Rural Development)	2002	2	20
6	MDes (Communication Design)	2004	2	20
7	PhD	2002	3-5	10-20

*Exclusive of NRI/Foreign students.

REVIEW OF CURRICULUM

The policy of DA-IICT is to continuously review and assess both teaching and learning to help faculty to improve and refine their teaching practices and aid to improve students' learning and performance. A Committee constituted in July 2015 with Academia and Industry Representatives reviewed and revised the curriculum of BTech (ICT) Program in the light of suggestions made by the international authorities such as the Institute of Electrical and Electronics Engineers (IEEE) and the Association of Computing Machinery (ACM). The Committee prepared its report taking feedback from the Industry and Alumni. On approval of the Committee's report by the Academic Council, the revised curriculum will be implemented from the academic year 2016-17.

ADMISSIONS 2016-17

The admissions to all programs are carried out using an online admission system. The notifications for admission were released in leading regional and national newspapers covering the entire country in April, 2016. The admissions were also publicized using Institute's web site, posters, brochures, social media network and the Alumni Association. The process of online filling in applications and payment of application fee was open from 5th April, 2016.

Undergraduate Programs BTech (Honours) in ITC with minor in Computational Science

The intake for BTech (ICT) Program is 240 and for BTech (ICT) Honours Program is 60 totaling 300 seats. In addition, 30 seats are offered to Non



Resident Indians, Persons of Indian Origin and Foreign Nationals. For admission purpose, the seats are divided into two Categories equally; All India Category and Gujarat Category. The All India Category seats are filled in by DA-IICT. The Gujarat Category seats are filled in by the Admission Committee for Professional Courses (ACPC), Government of Gujarat following their procedures and rules for admission.

For All India Category admission, the Institute received 5344 online applications. They were filled

in on the basis of the All India Rank of Joint Entrance Examination 2016 (JEE-2016) Main conducted by the Central Board of Secondary Education. The admissions to the remaining 150 seats were handled by ACPC. The admissions to the seats offered to Non-Resident Indians, Foreign Nationals and Persons of Indian Origin were done on the basis of the SAT/JEE Main score. The Institute follows the guidelines for admission of reserved category students. The starting and closing JEE merit ranks of the students admitted under each category are given in **Table 2**.

Table 2: JEE Merit Ranks of Students

Rank	Category	BTech (ICT)	BTech (Honours) (CS)
Best JEE Main Rank	All India (Gen)	2917	568
	Gujarat (Gen)	63	13
Lowest JEE Main Rank	All India (Gen)	12006	5409
	Gujarat (Gen)	452	271

PG Admissions

MTech (ICT): During the reporting year, six specializations were offered. Possession of a valid Graduate Aptitude Test in Engineering (GATE) score in a discipline specific to the specialization, as mentioned below was one of the requirements for admission. One hundred and two applicants were shortlisted for admission and sixty three candidates were admitted to the program.

Name of Specialization	GATE paper
Algorithmics (AL)	CS or MA
Communication Systems (COMM)	EC
Computer Networks (CNS)	CS or EC
Machine Intelligence (MI)	CS or EC
Signal Processing (SP)	EC or EE or IN
VLSI and Embedded Systems (VLSI)	EC or CS

The GATE cut-off of the students admitted is as follows:

Specialization	Highest-Score	Lowest-Score
CNS	658	457
COMM	576	393
MI	648	445
VLSI	687	463
AL	632	507
SP	573	409

MSc (IT): The students were selected through an entrance test conducted at selected centers all over the country. The test was for 90 minutes and the final merit list for admission was prepared on the basis of the aggregate score in the entrance test. Out of 414 applied, 174 candidates were shortlisted for admission. One hundred and twenty candidates were admitted to the program.

MSc (ICT-ARD): The students were selected through an entrance test conducted at selected centers in the country. The test was for 90 minutes. The final merit list for admission was prepared on the basis of the aggregate score in the entrance test. Out of the 73 candidates appeared for the entrance test, 19 were shortlisted for counseling/interview and 6 candidates were admitted for the program.

MDes (Communication): The students admitted to the program were selected through a Design Aptitude Test (DAT) conducted at DA-IICT. Those who qualified DAT were called for an interview. The final selection was based on the combined scores attained in DAT, interview and Statement of Purpose (SOP) submitted along with applications. The candidates with a valid CEED score were directly

called for the interview. Thirty applicants were called for entrance test/interview and 15 candidates were offered admissions and 14 have joined for the program.

PhD: The admission to the program was through DA-IICT entrance test/CPI obtained in MTech Degree awarded by DA-IICT/CSIR/UGC-NET qualification or GATE score. Out of 83 applicants, 21 candidates were called for interview on clearing the admission test. Fourteen candidates were called directly for interview based on their CSIR/UGC-NET qualification/GATE score/DA-IICT CPI. Twenty four candidates were shortlisted for admission and 12 have joined the program. **Table 3** shows the number of students admitted at the end of the admission process.

Table 3: Admissions Details

Programs	Application Received	Admission Offered
MTech (ICT)	262	102
MSc (IT)	414	174
MSc (ICT-ARD)	73	19
MDes (CD)	30	15
PhD	83	24

ORIENTATION

The orientation for Post Graduate students was conducted during 22-26 July, 2016. For Under Graduate students, the orientation was conducted during 25-28 July, 2016. During the orientation, they were given elaborate briefings on curriculum contents, academic requirements, rules and regulations. Specific program-wise sessions were organized with emphasis on details of curriculum and the available options with regard to elective courses. Apart from academic orientation, they were also given orientation to the campus and hostel life by the student volunteers. The students also met instructors of the first semester courses for briefings.

One of the sessions during the orientation was held for parents. The orientation familiarized the students and parents the course structure, evaluation system, grading, academic regulations, faculty, campus and infrastructure facilities.

FINANCIAL SUPPORT

The Institute provides financial support in the form of fellowships, scholarships and teaching and research assistantships to eligible students.

Reliance Merit Scholarships

Reliance, as part of its Corporate Social Responsibilities (CSR), has instituted merit scholarships for



students pursuing BTech (ICT) and MSc (ICT-ARD) Programs. The number of scholarship offered is 10 for BTech (ICT) and 5 for MSc (ICT-ARD) Programs. Awardees are selected on yearly basis. The scholarship is equal to the full tuition fee for the duration in which the scholarship is awarded. Twenty BTech and seven MSc (ICT-ARD) students have received the Scholarship during the reporting year.

DA-ICT Merit Scholarship

The Merit Scholarships are awarded to the top five students admitted to the BTech program having an All India Rank not exceeding 5000 in the JEE Main Examination. During the academic year 2015-16, in autumn semester 15 and in winter semester 13 students were awarded the Merit Scholarships.

DA-ICT Merit-cum-Means Scholarship

The Merit-Cum-Means Scholarships are awarded to five students in each semester based on their academic performance and whose parent(s)/guardian(s) annual income is up to Rs.2,50,000/-. Twenty one students have received the scholarship during the academic year 2015-16.

Assistantships

The Institute offers full-time and half-time teaching assistantships with monthly remuneration to PhD

Scholars and MTech (ICT) students. The BTech (ICT) students are offered half-time teaching assistantships in their final year studies. Twenty four PhD Scholars, 104 MTech and 06 BTech students received assistantships during the academic year 2015-16.

TCS Research Fellowship

The Tata Consultancy Services (TCS) has recognized DA-IICT as one of the Institutions to administer the TCS Research Scholar Program. This prestigious program provides attractive doctoral fellowships and contingency grant to full-time students pursuing PhD programs in broad areas of Computer Engineering, Computer Science, Information Systems, Information Technology and Software Engineering. Over and above fellowship, the Scholars are eligible to receive support for paper presentation in one International refereed conference, held outside India, and two National/International refereed conferences held in India, during the Scholar's tenure.

Ms. Gitam Shikkenawis, 2012-13 batch PhD Scholar, the recipient of the Fellowship has completed her Doctoral Studies. During the reporting year, Ms. Jainisha Sankhavara and Mr. Prashant Mansukhbhai Domadiya, 2015-16 batch PhD Scholars were awarded the Fellowship.



TCS Students Award

DA-IICT is one of the institutions selected by TCS for the 'TCS-100 Best' high-ranking engineering institute student award scheme. The 'TCS 100 Best' is to enhance student's attention towards academics through healthy competition. During the reporting year, Ms. Lavanya Gupta, BTech 2012-16 batch student, was conferred the award in 2016.

Chief Minister Scholarship Scheme and Mukhyamantri Yuva Swavlamban Yojana (MYSY), Government of Gujarat

The Government of Gujarat has designated DA-IICT as one of the Institutions to guide the under graduate students in preparation and submission of applications for the Chief Minister Scholarship and MYSY. The Registrar's Office assists and guide students from DA-IICT as well as students from other Institutions to apply for the 'Mukhyamantri Yuva Swavlamban Yojana (MYSY)' introduced in October 2015. The Scheme provides financial help to bright and needy undergraduate students whose parents income is up to Rs.4.5 lakh. Seventy one BTech students have received the Scholarship during the year 2015-16.

THESES

Master's Theses

The thesis work of the MTech (ICT) students starts from the summer semester after their second semester courses. They work comprehensively to generate interesting research outcome under the guidance of the faculty. Students of MSc (ICT-ARD) and M Des (CD) programs work full time on projects during their fourth semester at DA-IICT or at leading organizations. The list of projects completed by the students during the year is given in **Annexure 2**.

INSTITUTIONAL COLLABORATION AND STUDENT EXCHANGE PROGRAMS

The Institute has signed Memorandums of Understanding with national and international institutions to promote and enhance academic and research interaction as well as collaboration. The MOUs which were in force during the reporting period are as follows:

The Government of Gujarat: To mentor the Indian Institute of Information Technology, Vadodara set up on Public Private Partnership (PPP) model by the Central and State Governments and Industry.

Indian Navy: To admit eligible candidates sponsored by the Navy for MTech and other advanced courses including PhD, joint research and development and training.

Space Application Centre, Indian Space Research Organisation: To admit eligible Officers sponsored by the Space Application Centre for the PhD Program and collaborate in research and training.

University of Evora (Universidade de Evora), Portugal: For academic exchange, collaboration in teaching, research and exchange of scientific materials and publications, for advancement and dissemination of learning. Under the provisions of the MoU, DA-IICT is one of the Asian University Partners with the University of Evora in the Erasmus Mundus Fellowship Program of the European Commission.

Institut Supérieur D'Electronique De Paris, France: For exchange of faculty, students and joint research.

University of Dayton, USA: To develop academic exchange and co-operation in teaching and research for the advancement and dissemination of learning.



University of Swaziland (UoS), Swaziland:

For academic exchange, research and faculty development of UoS for the advancement and dissemination of learning.



University of Antwerp, Belgium: To exchange faculty, students and for scientific co-operation.

International Crops Research Institute for the Semi-Arid Tropics, Hyderabad:

To participate in teaching, training and research; explore external funding opportunities for research, exchange and host students and scholars for research and degree Programs by each other and exchange scientific materials and publications.

Indian Institute of Technology, Gandhinagar: To collaborate on teaching and research and exchange of scientific and academic personnel.

INFLIBNET Centre, Inter-University Centre of the University Grants Commission:

To participate in digitization of theses and dissertations and building-up of digital repository and to promote, share and host theses and dissertations in 'Shodhganga.'

Reliance Communications Limited: To institute the Research Chair to lead research and education in Computational Science and setting up of a Computational Science Laboratory at DA-IICT.

TCS Foundation: To nominate suitable full time PhD Scholars of DA-IICT for the TCS Research Scholar Program.

Ericsson India Private Limited: To impart trainings to the BTech students who have completed their sixth semester of studies and consider employment of the certified students with Ericsson India.

eiTRA-einfochips Institute of Training Research and Academics Limited, Ahmedabad:

To train and upgrade the skills of eiTRA employees, conduct lectures for academic programs offered by Ganpat University, provide consultancy and guidance for technological research and project execution, facilitate DA-IICT students to carry out their internship and project work at eiTRA-einfochips and jointly offer continuing education programs.

ICICI Bank:

MoU to participate at the ICICI Trinity Program. The Program encourages and promotes students' talent with a view to bring forth new ideas and innovations which can be applied in the banking/finance industry and help in their commercialization. The Program supports final year UG/PG five students team. In case of PhD Scholars, single Scholar can seek support.

Ramakrishna Sarada Sevashram, Bastar:

To sponsor eligible candidates for PhD studies at DA-IICT, develop and support joint research programs and conduct specialized courses

DA-IICT has a scheme to accept researchers and students from other institutions for research affiliation, internships or project work on recommendation of the faculty. The faculty members work as guides to them.

Continuing Education Program

DA-IICT designs and offer continuing education programs to assist researchers, academicians and professionals in industries, public and government organizations to develop their skills. These programs are identified as knowledge sharing programs and they are in the forms of workshops, seminars and hands-on training. The institute provides end –to –end

services in training and development for knowledge transfer and skill enhancement in areas such as Information and Communication Technology, GIS, VLSI Technology, Embedded Systems, Computer Vision and Image Processing, Wireless Communications, Network Administration and Security, Linux, Database Management, Software Testing and Soft skills.

Program	Sponsor/Coordinator	Period	No. of Participants
Softskill & M.S.Office	Indian Air Force	29th June 2015 to 10th July 2015	12
Maththematics Workshop	DA-IICT	8th Jan 2016 to 10th Jan 2016	11
C-Programming	Space Application Centre, Indian Space Research Organisation	19th Jan 2016 to 23rd Jan 2016	22
Statistical Signal Processing	Space Applciation Centre, Indian Space Research Organisation	8th March 2016 to 12th March 2016	21
Information & Communication Technology Management for Ministry of Energy & Water and FAO-UN Officials of Afghanistan	Food & Agricutlure Organization of the United Nations, Kabul & Sanguine Mangement Servics Private Limited, Ahmedabad	23rd May 2016 to 3rd June 2016	15
Cyber Security, Cyber Crime and Cyber Laws	DA-IICT	19th June 2016 to 31st July 2016	47
MS Office in depth	Indian Air Force	1st August 2016 to 12th August 2016	15





Placements & Internships

PLACEMENTS

DA-ICT has been one of the most preferred institutes by companies. A good number of students have been recruited with attractive packages by leading companies like Amazon, Bitmapper, Deloitte, Directi, Google, HSBC, LinkedIn, Juniper, SAP Lab, Samsung, Morgan Stanley, Oracle and TCS. The 2015-16 placement season saw recruiters from various domains of industries offering job profiles like software development, R&D Engineer, Business Technology Analyst, Data Scientist, Site Reliability Engineer, ASIC Design Engineer, Business Intelligence Consultants and Graduate Engineer Trainees.

Fifty five companies have participated in campus placement for 2015-16 batch.

Other companies visited DA-ICT for campus placements were Servify, Rtcomp, Verse, Wipro, Aspire Minds, E-Infochips, Evosys, Future First, Grit Innovations, Networks, Kuliza, MAQ Softwares, and MuSigma. The Students were also offered project internships in premier research institutions such as Capillary, Amazon and Oracle. The placement process also benefited junior batches with many of them securing summer internships.

Placement 2015-16	BTech	MTech	MScIT	MSc(ICT)ARD
Students opting for campus placement (each batch)	167	45	74	5
Students opting out of campus placement (each batch)	40	8	16	1
Total	207	53	90	6

Details	BTech	MTech	MScIT	MSc(ICT)ARD
Total Jobs offered	142	36	55	3

A good number of students got placements in the companies in which they did their summer internships.

The average annual salary package was Rs. 7.6 lakh. The highest salary package touched Rs. 27.5 lakh per annum.





Pool of Visited Companies at DA-IICT

RURAL INTERNSHIPS

The four-week Rural Internship is an academic requirement for BTech program being carried out in the third semester. The students get attached with voluntary organizations located in a village. The organizations assign a student to a specific project enabling him/her to a first-hand experience of the village life and social pattern in the area of primary education, healthcare, ecology etc. After completing the internship, the students present their findings as

poster presentations. Apart from adding value to their education, it is expected that the interns contribute to the efforts of the civil society organizations towards rural reconstruction.

The BTech 2014 batch comprised of 280 students - 57 female and 223 male students. They were placed in 8 States with 30 Non Governmental Organizations. The Rural Internship period was from 07 December 2015 to 02 January 2016. Details appear in **Table 1**.





Table 1: Organizations Involved in Rural Internship

Sr. No.	Non Governmental Organizations	State
1	Godavari Mahasamakha	A. P.
2	Sri Gowthami Urban and Rural Integrated Development & Educational Society	A. P.
3	Ramakrishna Sarada Sevashram	Chhattisgarh
4	Abhyan	Gujarat
5	Shri Bolbala Trust	Gujarat
6	Cohesion Foundation	Gujarat
7	Dharampur Utthan Vahini (DHRUVA)	Gujarat
8	DISHA Foundation	Gujarat
9	Gujarat Rural Institute for Socio-economic Reconstruction (GRISERV)	Gujarat
10	Garmin Vikas Trust (GVT)	Gujarat
11	Ishwar Gram Vikas Trust	Gujarat
12	Mehsana District Cooperative Milk Producers' Union Ltd.	Gujarat
13	Navjeevan Trust	Gujarat
14	Society for Integrated Land & Water Management (SOFILWM)	Gujarat
15	Sristi	Gujarat
16	Tribhuvandas Foundation (TF)	Gujarat
17	UNNATI Organization for Development Education	Gujarat
18	UTTHAN	Gujarat
19	Sutra	H. P.
20	North Himalayan Environment Protection & Education Society	Haryana
21	Savigya	M. P.
22	Aajeevika Bureau	Rajasthan
23	Action for Food Production (AFPRO)	Rajasthan
24	Astha Sansthan	Rajasthan
25	Foundation for Ecological Security (FES)	Rajasthan
26	Gramin Vikas Trust (GVT)	Rajasthan
27	Jatan Sansthan	Rajasthan
28	Himalayan Environmental Studies & Conservation Organization (HESCO)	Uttarakhand
29	Himalayan Institution for Environment Ecology and Development (HIFEED)	Uttarakhand
30	Peoples Science Institute (PSI)	Uttarakhand

As part of evaluation of Rural Internship, students made group-wise poster presentations which were evaluated by faculty members.

RESEARCH/ INDUSTRIAL INTERNSHIPS

At the end of the sixth semester, BTech students undertake a Research or Industrial Internship for 6 to 8 weeks during summer vacation. They are also required to undertake a BTech Project (BTP) in the eighth semester.

For Post-Graduate programs, the (i) MTech (ICT) students pursue one full year (two semesters) of research; (ii) MSc (IT) students undergo industry internship; and (iii) MDes students, a design project in the fourth semester. In Research Internship, the

students are required to work with a guide in an academic institution or a research and development unit of an industry. The purpose is to expose the students to research environment under the supervision of an expert in an ongoing work. The Industrial Internship exposes the students to the working environment of the industry with an expectation that this exposure help the students to make a better choice about their career after graduation. Students develop skills and techniques directly applicable to their careers and hone skills in the application of theory to practical work situations.

Number of students opting for Off-campus Summer internships - 30		
Sr. No.	Name of the organizations/ Institution	No. of students
1.	Google-India	1
2.	Amazon India Pvt Ltd	10
3.	Morgan Stanley Advantage Services Pvt Ltd	4
4.	Kivi Technology	8
5.	Maq Softwares	7

Number of students opting for Industrial Internship - 150		
Sr. No.	Name of the Organization	No. of Students
1.	Amazon Development Centre	1
2.	Grofers	3
3.	Morgan Stanley Advantage Services Pvt Ltd	7
4.	Searce Logistics	2
5.	Sprinklr Solutions Pvt Ltd	10
6.	Kuliza	5
7.	SAP Labs	5
8.	Deloitte Consultancy	9
9.	MAQ Softwares Pvt Ltd	7
10.	Evolutionary systems Pvt Ltd	1
11.	Practo	3
12.	Opshub Solutions Pvt Ltd	1
13.	Nagaroo Software	2
14.	SABA	1
15.	Helical	2
16.	Tata Consultancy Services	52
17.	Evive Health Care	3
18.	Ishi systems Pvt Ltd	4
19.	Grit Innovations Pvt Ltd	6
20.	Juniper Networks Pvt Ltd	9
21.	Coviam	3
22.	Kivi technologies Pvt Ltd	1
23.	Servify	8
24.	AKRSP(I)	1
25.	PlexusMD	4





Twelfth Convocation

The twelfth Annual Convocation was held on 16th January, 2017. Dr. A. Sivathanu Pillai, Distinguished Scientist and Honorary Distinguished Professor, Indian Space Research Organization, Bengaluru was the Chief Guest for the Convocation. Shri Suresh Rangachar, Member, Board of Governors and President, Reliance Communications Limited, Mumbai presided over the function.

Three hundred and seventy nine students have received their Degrees. They included 8 Doctoral Scholars, 47 MTech, 87 MSc (IT), 10 MSc (ICT-ARD), 7 MDes (CD) and 220 BTech (ICT) students.

The following students were awarded the President's Gold Medals for attaining scholastic achievements in their respective programs:

MTech (ICT) 2013

Shah Falak Himanshu

MSc (IT) 2013

Dikshit Prachi Manohar

MSc (ICT-ARD) 2013

(1) Jaykumar Dilipbhai Jivani

(2) Feneer Dalsukhbhai Amrutiya

M Des (CD) 2013

Palak Sanghani

BTech (ICT) 2011

Aimen Jawaid Haider

Dr. Sivathanu Pillai chose 'India-the Knowledge Powerhouse' as topic of his address. In his address, he recalled the ingenuity and creativity of great minds of ancient India and their contributions to mankind thousands of years back. He reminded the graduating students that today's information technology, that they have mastered, is based on the binary numbers of which '0' was the contribution from ancient India and such was the greatness of our country. He highlighted that Indian youth have

inherited the genes from those ancient super human beings and if they can activate them, they can become the super genius in the modern world.

Dr. Pillai evoked India's achievements in agriculture, dairying, healthcare and pharmaceuticals. He brought to the attention of the august audience that with the commitment and hard work of agriculture and dairy scientists and technologists and dedicated farmers, India became self-sufficient in food, milk production and pharmaceuticals. He highlighted that with the three three-stage nuclear programs formulated by Dr. Homi Bhabha, India became one of the leading nations in Nuclear Research and has now stepped into advanced research in fusion technology which will give India the much needed break-through in nuclear science and energy security for the country. Dr. Vikram Sarabhai's vision of making India a nation of space research to utilize its best advantages for the benefit of mankind came true with spectacular achievements. In the area of missile development and super computers, he highlighted that with the best of Indian minds and institutions, India developed critical technologies and defeated the developed nations' control regime. He asked the young scientists to explore emerging technologies like quantum computing, exotic materials, sensors and nano-bio-info convergence. He narrated how the Information and Communication Technology is making our society borderless and called it as 'Next Generation ICT Society.'

Dr. Pillai counseled the talented Indian youth with higher education to embark on knowledge acquisition, knowledge imparting, knowledge creation and knowledge sharing. He wanted our universities and educational systems to create two cadres of personnel: (1) a global cadre of skilled youth with specific knowledge of special skills; (2) another global cadre of youth focusing on research

and innovation. He ended his address by declaring that “If we are expected to Achieve Results never before Accomplished, We must employ Methods never before Attempted, but with Utmost Honesty.” He reminded the graduating students that they are in the blossom phase of their career and advised:

“you are the makers of India, great aim, creativity, innovation, hard work and perseverance, and above all love for India and righteousness in action are the important factors that will drive you for success in all your endeavours and make India a Great Nation.”





Research and Development (Sponsored Projects and Entrepreneurship)

Ever since it was founded, the Institute has had a vibrant research environment. This has brought dynamism to all academic activities. The Institute has a full range of research infrastructure and facilities, such as well-equipped laboratories, specialized equipment, campus-wide networking, high-speed Internet access, and subscription to hundreds of print and online resources. The Institute also houses an Incubation Center to nurture and develop business ideas based on new technology.

The faculty, students, and research staff are active in research in several disciplines, including but not limited to the following: computer science, electronics

and communication, mathematics, physics, agriculture and rural development, humanities, and social sciences. The faculty members have been regularly publishing their research work in leading refereed journals and conferences. Over the last decade, a large number of sponsored projects have been initiated by faculty, including international projects. Many students have started their own companies.

SPONSORED PROJECTS

In the year 2015-16, the Institute received 3 new projects. The faculty continued work on 12 on-going projects.

Table 1: New Projects

AGENCY	TITLE	DURATION	INVESTIGATORS
SAC-ISRO	Development of Ultra Low Power And Low Voltage Time to Digital Converter(TDC) for Space Applications	2016 (2 Years)	Biswajit Mishra Mazad Zaveri
DST (Indo-French)	Study of Privacy, Accountability and Ownership in IoT	2016 (3 Years)	Manik Lal Das Anish Mathuria
SAC-ISRO	Detection of heavy metal pollution in vegetation and characterization of soil clay minerals using AVIRIS-NG Data	2016 (2 Years)	Ranendu Ghosh P.S. Kalyan Sasidhar





Table 2: On-going Projects

AGENCY	TITLE	INVESTIGATORS
GHM	Techno Feasibility Study on Automation of hydroponics and green house cultivation	Ranendu Ghosh Rahul Dubey
NBHM	Knowledge Compilation in modal and Multimodal Logic	Manoj Raut Rahul Muthu
GUJCOST	Processor RTL Customization and Development of Low Power Design Flow Methodology	Amit Bhatt Mazad Zaveri
GUJCOST	Enabling Technologies for Remote Health Monitoring	Biswajit Mishra Manik Lal Das
BRNS	Kinetic Modeling of Large size negative Ion Sources for Fusion Application using Emerging Parallel Processing Computer Architecture	Bhaskar Chaudhury Mukesh Tiwari
DST	Development of Infant Cry Analyzer Using Source And System Features	Hemant Patil
DeitY	Development of Cross Lingual Information (CLIA) System Phase-II	Prasenjit Majumder Suman Mitra
National Innovation Foundation	Value Addition in Grassroots Technologies	Anil Roy Rahul Dubey
DeitY	Development of Text to Speech System in Indian Languages High quality text to speech synthesis and small footprint TTS integrated with disability aids	Hemant Patil M.V. Joshi
DeitY	Speech based Access of Agricultural Commodity Prices and Weather Information in 12 Indian Languages/ Dialects (Automatic Speech (ASR) Consortium Phase-II	Hemant Patil M.V. Joshi
SAC-ISRO	Ultra Wide Band Dielectric Resonator Antenna	Deepak Ghodgaonkar Sanjeev Gupta
NSF/TCPP	Fall-14 CDER Early Adopter	Bhaskar Chaudhury Mukesh Tiwari

The Faculty completed work on 2 projects and they were sponsored by DST and BRNS.

Table 3: Completed Projects

AGENCY	TITLE	INVESTIGATORS
DST	Indian Digital Heritage (IDH-Hampi) Phase-II (Digital Capture of Culture & Heritage)	Manjunath Joshi Hemant Patil
BRNS	Techniques for Robust Face Recognition with post variation	Suman Mitra Mehul Raval

INCUBATION CENTRE

The Centre, established in 2011 promotes innovation and entrepreneurship culture among DAIICT community. DCEI is supported by the Department of Electronics & Information Technology (DeitY), Government of India and the Government of Gujarat. The Centre has incubated following 6 start-ups and notable among them is Corygbee Private Limited, a start-up, for the first time, by a faculty.

- 1) Almaconnect Solutions Private Limited
- 2) Playpower Labs Private Limited:
- 3) Appbin Labs Private Limited:
- 4) Kamkaaj Solutions Private Limited:
- 5) Corygbee Private Limited (Rygbee)
- 6) Innorruption Tech Solution Private Limited

The Incubation Centre has received Rs. 15 lakh grant from Industries Commissionerate, Government of Gujarat, for expansion of its activities. The grant will be used for supporting new start-up companies.



CONSULTANCY PROJECTS

ORGANIZATION	CONSULTING AREA	FACULTY
(n) Code Solutions	(1) Testing of Wireless Device and CCTV Surveillance	Anil Roy
	(2) Internet Wi-Fi Network Security Testing	Anil Roy





Workshops, Special Lectures and Visitors

SPECIAL LECTURES

- Mr. Debanjan Bhattacharjee, Indian Classical Sarod Artist, 'Genesis of Indian Ragas and Use of Science and Technology in Indian traditional music,' 06 April 2016.
- Dr. Anoop Singhal, Senior Computer Scientist in the Computer Security Division at NIST, 'Security Metrics and Risk Analysis of Enterprise Systems: Techniques and Challenges,' 08 March 2016.
- Mr. Hari Om Gandhi, Zonal Director, Narcotics Control Bureau, Gujarat, 'Healthy Campus,' 04 March 2016.
- Prof. Brian A Barsky, Professor of Computer Science and Vision Science, and Affiliate Professor of Optometry, University of California at Berkeley, USA, 'From Vision-Realistic Rendering to Vision Correcting Display,' 01 February 2016.
- Dr Shital Punjabi, A leading gynecologist from Ahmedabad, Oowomaniya, 'Talk on women's health issues,' 18 January 2016.
- Shri Ram Chandra Mission (SRCM), 'Self Development Program @ DA-IICT,' 10 October 2015.
- Dr. M K Radhakrishnan, Founder Director, NanoRel Technical Consultants, Singapore, 'VLSI - The Soul of Engineering Evolution in Electronics,' 06 October 2015.
- Dr. Pradeep K. Sinha, Senior Director (Corporate Strategy and R&D) at the Centre for Development of Advanced Computing (C-DAC), 'Becoming Professionally Successful,' 19 August 2015.



SEMINAR/WORKSHOPS

- TCS Research Interaction, 12 March 2016
- National Workshop on Big Data Analytics, 7 December 2015
- ISRO-SAC-SSP workshop, 8-12 March 2016
- IEEE CIS Winter School 2016, Summer / Winter Schools, 1-5 March 2016
- Summer School on Speech Signal Processing (S4P) 2016, Summer / Winter Schools, 4-8 July 2016



VISITORS

- Dr. Hiromichi Fujisawa, Corporate Chief Scientist, Hitachi's R&D Group, Japan, visited DAIICT during 11-17 January, 2016. He was also the Guest of Honour for our 12th Convocation. Dr. Fujisawa delivered an institute talk on Jan 12, 2016. He also met faculty in groups.
- Shri. Munaf Patel, Cricketer who represented India in World Cup, was Special Guest at the Opening Ceremony of Annual Inter-College Sports Fest CONCOURS-2015 on 29 October 2015.
- A group of 107 students of VPMP Polytechnic College, Gandhinagar along with their faculty members visited DA-IICT to know Network Infrastructure and Data Center, 3 September 2015.

- Dr. Tapan Misra, Director, ISRO, and Mr. Ravisankar, Head (HRD) visited DAIICT for ISRO CEP program on 22 Jan 2016.
- Prof. Biswarup Sen, University of Oregon, Eugene, Oregon, visited DA-IICT during 16-17 December 2015 to explore possible academic and research collaboration.
- A group of 42 Higher Secondary Students from Shiv Ashish School (CBSE), Ahmedabad accompanied by Teachers, Ms. Savitri Dhiman, Mr. Pratush Raval and Ms. Nivedita, visited DA-IICT on 22nd April, 2016. They were briefed on the Institute, its teaching programs, research, Resource Centre and Laboratories. They also visited the Resource Centre and Laboratories.



Faculty Publications

Publications reflect faculty and staff interests and their research initiatives. The publications have appeared primarily in peer-reviewed conferences and journals. Majority of publications have student co-authors indicating a strong faculty commitment to train and mentor

both postgraduate and undergraduate students in research.

During the reporting year, the faculty published 2 books, 6 chapters in books and 106 papers in journals and conferences along with 3 patents.

Books

1. Clare Anderson, **Madhumita Mazumdar** and **Vishvajit Pandya**, *New Histories of the Andaman Islands-Landscape, Place, Identity in the bay of Bengal-1790–2012*. Cambridge: Cambridge University Press, 2016.

Edited Book

1. **Prasenjit Majumder**, Mandar Mitra, Madhulika Agrawal, and Parth Mehta, Eds. *Proceedings of the 7th Forum for Information Retrieval Evaluation*. New York: Association for Computing Machinery, 2015.

Book Chapters

1. **Bhaskar Chaudhury**, "Plasma-Based Radar Cross Section Reduction: Plasma Stealth Technology," in *Encyclopedia of Plasma Technology*, J. Leon Shohet Ed., Boca Raton, FL: CRC Press, 2016.
2. **Manik Lal Das**, "Privacy and Accountability Concerns in the Age of Big Data," in *Big Data: Storage, Sharing, and Security*, Fei Hu Eds., Boca Raton, FL: CRC Press, May 2016. pp. 341–356. doi: 10.1201/b19694-17
3. Rachit Mittal, Sarita Agrawal, and **Manik Lal Das**, "Secure Node Localization in Clustered Sensor Networks with Effective Key Revocation," in *Emerging Innovations in Wireless Networks and Broadband Technologies*, Naveen Chilamkurti, Ed., Hershey, PA: IGI Publishing, 2016. doi: 10.4018/978-1-4666-9941-0.ch002
4. **Manish Narwaria**, M. Perreira Da Silva, and P. Le. Callet, "Dual modulation for LED-backlit HDR displays," in *High Dynamic Range Video From*

Acquisition to Display and Applications, P. Callet, R. Mantiuk, M. Mrak and F. Dufaux, Eds., San Diego: Academic Press, 2016.

5. **Manish Narwaria**, M. Perreira Da Silva, P. Le. Callet, G. Valenzise, F. De Simone and F. Dufaux, "Quality of Experience and HDR: concepts and how to measure it," in *High Dynamic Range Video From Acquisition to Display and Applications*, P. Callet, R. Mantiuk, M. Mrak and F. Dufaux, Eds., San Diego: Academic Press, 2016.
6. **Manish Narwaria**, R. Mantiuk, P. Le. Callet, G. Valenzise, F. De Simone and F. Dufaux, "HDR Image and Video Quality Prediction," in *High Dynamic Range Video From Acquisition to Display and Applications*, P. Callet, R. Mantiuk, M. Mrak and F. Dufaux, Eds., San Diego: Academic Press, 2016.

Journal Papers

1. **Alka Parikh** "Inter-Country Comparison of Food Security Schemes: Lessons Learnt," *Journal of Arid Land Studies*, vol. 25, no. 3, pp. 89-91, Sept. 2015.
2. **A. Purushothaman** and Chetan D. Parikh, "A low power low area capacitor array based Digital to Analog Converter architecture," *Microelectronics Journal*, vol. 46, no. 10, pp. 928-934, 2015. doi: 10.1016/j.mejo.2015.07.010
3. **Bharani Kollipara**, "Tradition and Discipline: How should one read ancient Indian texts," *Modern Asian Studies*, vol. 50, no.4, pp. 1327–1402, July 2016. doi: 10.1017/S0026749X1600008
4. **Bharani Kollipara**, "Modernity, Commonsense and Epistemological Crisis: A Reading of Sripada Subrahmanya Sastri's Memoirs,"



- Journal of Contemporary Thought*, no. 41, pp. 79-116, Oct. 2015.
5. **Biswajit Mishra**, C. Botteron, D. Briand, G. Tasselli, P. Janphuang, F.-J. Haug, A. Skrivervik, R. A. Lockhart, C. Robert, N.F.de Rooij, and P.A. Farine, "A low-cost UWB sensor node powered by a piezoelectric harvester or solar cells," *Sensors and Actuators A: Physical*, vol. 239, pp. 127-136, Mar. 2016. doi:10.1016/j.sna.2016.01.011
 6. Sanket S. Patel, **Sanjeev Gupta** and **Deepak Ghodgaonkar**, "Design of Low Power Low Phase Noise Negative Resistance KU-Band VCO using Planar Resonator Pair," *Microwave and Optical Technology Letters*, vol. 57, no. 8, pp. 1938-1941, Aug. 2015. doi: 10.1002/mop.29232
 7. Sneha Pande and **Ganesh Bagler**, "A data and information driven discovery framework to bridge traditional and modern medicine," *Advanced Techniques in Biology and Medicine*, vol. 3, no. 141, Sept. 2015. doi: 10.4172/2379-1764.1000141
 8. Shivalika Pathania, **Ganesh Bagler** and Paramvir Singh Ahuja, "Differential network analysis reveals evolutionary complexity in secondary metabolism of *Rauvolfia serpentina* over *Catharanthus roseus*," *Frontiers in Plant Science*, vol. 7, Aug. 2016. doi:10.3389/fpls.2016.01229
 9. Hardik B. Sailor and **Hemant A Patil**, "Novel Unsupervised Auditory Filterbank Learning Using Convolutional RBM for Speech Recognition," *IEEE/ACM Transactions on Audio, Speech and Language Processing*, vol. 24, no. 12, pp. 2341-2353, Dec. 2016. doi: 10.1109/TASLP.2016.2607341
 10. **Jaideep Mulherkar**, "Classical and entanglement-assisted capacity of a qubit depolarizing memory channel International," *Journal of Quantum Information*, vol. 14, no. 3, pp. 1650017-1-16, June 2016. doi: 10.1142/S0219749916500179
 11. D. Mocanu, J. Pokhrel, J. Pablo Garella, J. Seppanen, E. Liotou, and **Manish Narwaria**, "No-reference Video Quality Measurement: The Added Value of Machine Learning," *Journal of Electronic Imaging*, vol. 24, no. 6, Dec. 2015. doi: 10.1016/j.asoc.2015.04.005
 12. Rakesh C. Patel and **Manjunath Joshi**, "Super-resolution of Hyperspectral Images Using Sparse Representation and Gabor Prior," *Journal of Applied Remote Sensing*, vol. 10, no. 2, p. 026019, May 2016. doi: 10.1117/1.JRS.10.026019
 13. **Manoj K Raut** and **Manish K Gupta**, "On Octonary Codes and their Covering Radii," *The Australasian Journal of Combinatorics*, vol. no. 63, pp. 246-261, Oct. 2015.
 14. **Mukesh Tiwari**, T. R. Krishna Mohan and Surajit Sen, "Decorated granular layers for impact decimation," *Granular Matter*, vol. 18, no. 3, pp. 1-5, Aug. 2016. doi: 10.1007/s10035-016-0652-y
 15. **Nabin K Sahu**, "Implicit variational inclusions and algorithms involving (A, Φ) -monotone operators in 2-uniformly smooth Banach spaces," *Journal of Mathematics and System Science*, vol. 5, pp. 214-223, June 2015. doi:10.17265/2159-5291/2015.06.006
 16. **Nabin K Sahu**, C. Nahak, R. N. Mohapatra and N. K. Mahato, "A New Class of Generalized Monotone Mappings and Variational Inclusion Problems in Banach Spaces," *Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis*, vol. 23, no. 6, pp. 447-463, 2016.
 17. **Naresh Jotwani**, "The Science of Peace," *Journal of Bhavan's*, Diwali Special Number, Nov. 2015.
 18. Kripabandhu Ghosh, Swapan K. Parui, and **Prasenjit Majumder**, "Learning combination weights in data fusion using Genetic Algorithms," *Information Processing & Management*, vol. 51, no. 3, pp. 306-328, May 2015. doi: http://dx.doi.org/10.1016/j.ipm.2014.12.002

19. Parth Mehta and **Prasenjit Majumder**, "Large Scale Quantitative Analysis of three Indo-Aryan Languages," *Journal of Quantitative Linguistics*, vol.23 no.1, pp. 109-132, Feb. 2016. doi: 10.1080/09296174.2015.1071151
20. **Rajib Lochan Das** and M. Chakraborty, "Improving the Performance of the PNLMS Algorithm Using l_1 Norm Regularization," *IEEE Transactions on Audio, Speech, and Language Processing*, vol. 24, no. 7, pp. 1280-1290, July 2016. doi: 10.1109/TASLP.2016.2552578
21. Zunnun Narmawala and **Sanjay Srivastava**, "Community Aware Heterogeneous Human Mobility (CAHM): Model and Analysis," *Pervasive and Mobile Computing*, vol. 21, pp. 119-132, Aug. 2015. doi: 10.1016/j.pmcj.2014.12.008
22. **Saurabh Tiwari**, "A systematic literature review of use case specifications research," *Information and Software Technology*, vol. 67, pp. 128-158, Nov. 2015. doi: 10.1016/j.infsof.2015.06.004
23. **Sourish Dasgupta**, Vaghela, Savan, Modi, Vishwa and Kanakia, Hitarth, "s-Birds Avengers: A Dynamic Heuristic Engine-Based Agent for the Angry Birds Problem," *IEEE Transactions on Computational Intelligence and AI in Games*, vol. 8, no. 2, June 2016, pp. 140-151. doi: 10.1109/TCIAIG.2016.2553244
24. Mukesh M. Goswami and **Suman K Mitra**, "Offline Handwritten Gujarati Numeral Recognition using Low-Level Strokes," *International Journal of Applied Pattern Recognition*, vol. 2, no. 4, pp. 353-379, 2016. doi: 10.1504/IJAPR.2015.075955
25. Mukesh M. Goswami and **Suman K Mitra**, "Classification of Printed Gujarati Characters using Low-Level Stroke Features," *ACM Transaction on Asian and Low Resource Language Information Processing*, vol. 1, no. 4, article no. 25, pp. 1-26, June 2016. doi:10.1145/2856105
26. Gitam Shikkenawis and **Suman K Mitra**, "2D Orthogonal Locality Preserving Projection for Image Denoising," *IEEE Transaction on Image Processing*, vol. 25, no. 1, pp. 262-273, Jan. 2016. doi: 10.1109/TIP.2015.2501753
27. Gitam Shikkenawis and **Suman K Mitra**, "On some variants of locality preserving projection," *Neurocomputing*, vol. 173, pp. 196-211, Jan. 2016. doi: 10.1016/j.neucom.2015.01.100
28. Gitam Shikkenawis, **Suman K Mitra** and Ajit Rajwade, "Image denoising using orthogonal locality preserving projection," *Journal of Electronic Imaging*, vol. 24, no. 4, p. 043018, Aug. 2015. doi: 10.1117/1.JEI.24.4.043018
29. Ashish Phophalia and **Suman K Mitra**, "Rough set based bilateral filter design for denoising brain MR images," *Applied Soft Computing*, vol. 33, pp. 1-14, Aug. 2015. doi: 10.1016/j.asoc.2015.04.005
30. **Yash Agrawal**, "A Comprehensive model for high-speed current-mode signaling in next generation MWCNT bundle interconnect using FDTD technique," *IEEE Transactions on Nanotechnology*, vol. 15, no. 4, pp. 590-598, July 2016. doi: 10.1109/TNANO.2016.2558475
31. **Yash Agrawal**, "A Novel Unified Model for Copper and MLG NR Interconnects using Voltage and Current-Mode Signaling Schemes," *IEEE Transactions on Electromagnetic Compatibility*, vol. 59, no. 1, pp. 217-227, July 2016. doi: 10.1109/TEMPC.2016.2587821
32. **Yash Agrawal**, "Crosstalk analysis of current-mode signalling-coupled RLC interconnects using FDTD technique," *IETE Technical Review*, vol. 33, no. 2, pp. 148-159, July 2015. doi: 10.1080/02564602.2015.1056258
33. **Yash Agrawal**, "Carbon nanotube interconnects-A promising solution for VLSI circuits," *IETE Journal of Education*, vol. 57, no. 2, pp. 46-64, Apr. 2016. doi: 10.1080/09747338.2016.1158129
34. **Yash Vasavada**, R. Gopal, C. Ravishankar, G. Zakaria and N. Ben Ammar, "Architectures for Next Generation High Throughput Satellite Systems," *International Journal of Satellite*



Communications and Networking, vol. 34, no. 4, pp. 523–546, July/Aug. 2016. doi: 10.1002/sat.1175

35. C. Ravishankar, A. Noerpel, J. Jong, G. Zakaria, N. BenAmmar, D. Arur, A. Morris, G. Leon, X. Huang, H. Ramachandran, E. Xu, **Yash Vasavada**, and C. Barnett, “Design and performance of an all-Internet Protocol mobile satellite system,” *International Journal of Satellite Communications and Networking*, vol. 33, no. 4, pp. 329-349, July/Aug. 2015. doi: 10.1002/sat.1107

Conference and Workshop Papers

1. **Alka Parikh**, “Food Security Index for Tajikistan,” presented at *International Conference on Agriculture and Food Systems, Climate Change and Nutrition in CIS Countries*, Lomonosov Moscow State University, IFPRI and World Bank, Moscow, Russia, Feb. 11, 2016.
2. **Alka Parikh**, “Food Security Strategies,” in *Fourth International Conference on WTO, Trade and Agriculture*, Centre for WTO Studies, IIFT, Delhi, Oct. 29-30, 2015.
3. Naveen Kumar, **Anish Mathuria** and **Manik Lal Das**, “Comparing the Efficiency of Key Management Hierarchies for Access Control in Cloud,” in *Proc. International Symposium on Security in Computing and Communications*, Kelara, India, Aug. 10-13, 2015, Springer Communications in Computer and Information Science, vol. 536, Springer, pp. 36-44. doi: 10.1007/978-3-319-22915-7_4
4. Naveen Kumar, **Anish Mathuria** and **Manik Lal Das**, “Achieving Forward Secrecy and Unlinkability in Cloud-Based Personal Health Record System,” in *Proc. 8th IEEE International Symposium on Security, Privacy and Anonymity in Internet of Things (TrustCom/BigDataSE/ISPA)*, Helsinki, Finland, Aug. 20-22, 2015, pp. 1249-1254. doi: 10.1109/Trustcom.2015.513
5. **Bhaskar Chaudhury**, “Integrating Parallel Computing courses into the Undergraduate Programs in ICT and Computational Science,” presented at *6th NSF/TCPP Workshop on Parallel and Distributed Computing Education*, The 30th IEEE International Parallel & Distributed Processing Symposium, Chicago, USA, May 23, 2016.
6. **Bhaskar Chaudhury**, “Computational Modeling of Microwave Streamer Dynamics,” in *27th IUPAP Conference on Computational Physics: CCP2015*, IIT Guwahati, Dec. 2-5, 2015.
7. Hardik Vyas, **Bhaskar Chaudhury**, **Sanjeev Gupta**, “Computational Investigation of Microstrip Antennas in Plasma Environment,” in *Proc. IEEE Applied Electromagnetics Conference*, Guwahati, Assam, Dec. 18-21, 2015. doi: 10.1109/AEMC.2015.7587074
8. S. Kasodniya, **Biswajit Mishra** and N. Desai, “Ultra Low Power Capacitive Power Management Unit in 0.18um CMOS,” in *2nd IEEE International Conference on VLSI Systems, Architecture, Technology and Applications*, Bangalore, India, Jan. 10-12, 2016. doi: 10.1109/VLSI-SATA.2016.7593057
9. V. Sharma, N. Jain and **Biswajit Mishra**, “Fully Digital Time based ADC/TDC in 0.18um CMOS,” in *2nd IEEE International Conference on VLSI Systems, Architecture, Technology and Applications*, Bangalore, India, Jan. 10-12, 2016. doi: 10.1109/VLSI-SATA.2016.7593040
10. J. Shah and **Biswajit Mishra**, “Customized IoT enabled Wireless Sensing and Monitoring Platform for Smart Buildings,” in *3rd International Conference on Innovations in Automation and Mechatronics Engineering-ICIAME2016*, Gujarat, India, Feb. 5-6, 2016. doi: 10.1016/j.protcy.2016.03.025
11. J. Shah and **Biswajit Mishra**, “Customized IoT enabled Wireless Sensing and Monitoring Platform for Preservation of Artwork in Heritage Buildings,” in *International Conference on Wireless Communications, Signal Processing and Networking*, Chennai, India, Mar. 23-25, 2016. doi: 10.1109/WISPNET.2016.7566156

12. J. Shah and **Biswajit Mishra**, "IoT enabled Environmental Monitoring Systems for Smart Cities," in *International Conference on Internet of Things and Applications*, Pune, India, Jan. 22-24, 2016. doi: 10.1109/IOTA.2016.7562757
13. **Biswajit Mishra**, "Internet of Things enabled Microclimate Monitoring System," in *India International Science Festival*, New Delhi, India, Dec. 4-8, 2015.
14. N. Jain and **Biswajit Mishra**, "DCT and CORDIC on a Novel Configurable Hardware," in *2015 IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia)*, Hyderabad, India, Nov. 27-29, 2015. doi: 10.1109/PrimeAsia.2015.7450469
15. S. Tripathi, N. Jain and **Biswajit Mishra**, "Ultra Low Power 128 byte Memory Design based on D-Latch in 0.18um process," in *2015 IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics*, Hyderabad, India, Nov. 27-29, 2015. doi: 10.1109/PrimeAsia.2015.7450476
16. **Bharani Kollipara**, "Logos and Philosophy: Comments on Professor Gasche's Europe and the Stranger in Symposium on Professor Rodolphe Gasché's Europe and the Stranger," in *IV Balvant Parekh Memorial Lecture and Symposium, Balvant Parekh Center for General Semantics and Other Human Sciences*, Baroda, Oct. 30-31, 2015.
17. **Jaideep Mulherkar**, "Classical capacity of a qubit depolarizing quantum memory channel with Markovian correlated noise," in *Proceedings of Asian quantum information science conference, KIAS Seoul*, South Korea, Aug. 24-30, 2015.
18. Hardik N. Patel and **Deepak Ghodgaonkar**, "The Effect of Noise on Complex Permittivity Reconstruction in Mathematical Breast Model," in *International Conference on Systems in Medicine and Biology*, Kharagpur, Jan. 4-7, 2016, pp. 1-4.
19. Hardik N. Patel and **Deepak Ghodgaonkar**, "Computationally efficient microwave imaging of human breast model using group theory," in *2015 IEEE MTT-S International Microwave and RF Conference*, Hyderabad, India, Dec. 10-12, 2015, pp. 81-84. doi: 10.1109/IMaRC.2015.7411383
20. G. D. Makwana, **Deepak Ghodgaonkar** and **Sanjeev Gupta**, "Narrowband Square Dielectric Resonator Antennas," in *International Workshop Antenna Innovations and Modern Technologies*, Ahmedabad, Dec. 26-27, 2015.
21. Anshu Chittora and **Hemant A Patil**, "Modified group delay-based features for Asthma and HIE infant cries classification," in *Speech and Dialogue:18th International Conference, TSD 2015 Pilsen, Czech Republic*, Lecture Notes in Artificial Intelligence, Kral, Pavel, and Vaclav Matousek, Eds., New York: Springer, Sept. 14-17, 2015, pp. 595-602. doi: 10.1007/978-3-319-24033-6_67
22. Anshu Chittora and **Hemant A Patil**, "Significance of unvoiced segments and fundamental frequency for infant cry analysis," in *Speech and Dialogue:18th International Conference, TSD 2015 Pilsen, Czech Republic*, Lecture Notes in Artificial Intelligence, Král, Pavel, and Václav Matoušek, Eds. New York: Springer, Sept. 14-17, 2015, pp. 273-281. doi: 10.1007/978-3-319-24033-6_31
23. Aditya Raikar, Ami Gandhi and **Hemant A Patil**, "Combining evidences from Mel cepstral and cochlear cepstral features for speaker recognition for whispered speech," in *Speech and Dialogue:18th International Conference, TSD 2015 Pilsen, Czech Republic*, Král, Pavel, and Václav Matoušek, Eds. Lecture Notes in Artificial Intelligence, New York: Springer, Sept. 14-17, 2015, pp. 405-413. doi: 10.1007/978-3-319-24033-6_46
24. Maulik C. Madhavi, Shubham Sharma, and **Hemant A Patil**, "Vocal tract length normalization features for audio search," in *Speech and Dialogue:18th International Conference, TSD*



- 2015 Pilsen, Czech Republic, Král, Pavel, and Václav Matoušek, Eds., Lecture Notes in Artificial Intelligence, New York: Springer, Sept. 14–17, 2015, pp. 387-395. doi: 10.1007/978-3-319-24033-6_44
25. Mohammadi Zaki, Hardik B. Sailor and **Hemant A Patil**, "Analysis of hierarchical bottleneck framework for improved phoneme recognition," in *International Conference on Signal Processing and Communications*, Bangalore, India, June 12-15, 2016. doi: 10.1109/SPCOM.2016.7746673
26. Deep Gandhi, Tanvina B. Patel and **Hemant A Patil**, "A novel lowpass filtering-based approach for estimating strength of excitation from speech signal," in *International Conference on Signal Processing and Communications*, Bangalore, India, June 12-15, 2016. doi: 10.1109/SPCOM.2016.7746677
27. Maulik C. Madhavi and **Hemant A Patil**, "Modification in sequential dynamic time warping for fast computation of query-by-example spoken term detection task," in *International Conference on Signal Processing and Communications*, Bangalore, India, June 12-15, 2016. doi: 10.1109/SPCOM.2016.7746657
28. Tanvina B. Patel and **Hemant A Patil**, "Effectiveness of fundamental frequency (Fo) and strength of excitation (SOE) for spoofed speech detection," in *The 41st IEEE International Conference on Acoustics, Speech and Signal Processing*, sShanghai, China, Mar. 20-25, 2016. doi: 10.1109/ICASSP.2016.7472650
29. Tanvina B. Patel and **Hemant A Patil**, "Analysis of natural vs. synthetic speech using Fujisaki model for low resourced language," in *The 41st IEEE International Conference on Acoustics, Speech and Signal Processing*, China, Mar. 20-25, 2016.
30. Hardik B. Sailor and **Hemant A Patil**, "Filterbank learning using convolutional restricted Boltzman machine for speech recognition," in *The 41st IEEE International Conference on Acoustics, Speech and Signal Processing ICASSP'16*, Shanghai, China, Mar. 20-25, 2016. doi: 10.1109/ICASSP.2016.7472808
31. Tanvina B. Patel and **Hemant A Patil**, "Combining evidences from Mel cepstral, cochlear filter cepstral and instantaneous frequency features for detection of natural vs. spoofed speech," in *the 16th Annual Conference of International Speech Communication Association*, Dresden, Germany, Sept. 6-10, 2015.
32. Maulik C. Madhavi, **Hemant A Patil** and Bhavik B. Vachhani, "Spectral transition measure for detection of obstruents," in *the 23rd European Signal Processing Conference*, Nice, France, Aug. 31- Sept. 4, 2015. doi: 10.1109/EUSIPCO.2015.7362399
33. Mohammadi Zaki, Nirmesh J. Shah and **Hemant A Patil**, "Effectiveness of multiscale fractal dimension for improvement of frame classification rate," in *the 23rd European Signal Processing Conference*, Nice, France, Aug. 31- Sept. 4, 2015. Doi: 10.1109/EUSIPCO.2015.7362537
34. Anshu Chittora and **Hemant A Patil**, "Classification of normal and pathological infant cries using bispectrum features," in *the 23rd European Signal Processing Conference*, Nice, France, Aug. 31- Sept. 4, 2015. doi: 10.1109/EUSIPCO.2015.7362461
35. Harsh Trivedi, Aanal Patel and **Prasenjit Majumder**, "A New Approach to Syllabification of Words in Gujarati," in *Proc. Third International Conference on Mining Intelligence and Knowledge Exploration*, Hyderabad, Dec. 9-11, 2015, pp. 631-639. doi: 10.1007/978-3-319-26832-3_59
36. Devanshu Jain, **Prasenjit Majumder**, "DA-IICT Submission for PDTB-styled Discourse Parser," in *Proc. CoNLL 2016 Shared Task Multilingual Shallow Discourse Parsing*, Berlin, Germany, Aug. 11-12, 2016, pp. 122-128.
37. **L. S. Pillutla**, S. Gupta, and D. Singh, "Impact of Network Coding on Distributed Indoor Target Tracking using Wireless Sensor Networks,"

- in *2015 18th International Symposium on Wireless Personal Multimedia Communications*, Hyderabad, Dec. 13-16, 2015.
38. Shrishail Gajbhar and **Manjunath Joshi**, "Design of Biorthogonal Wavelet Filters of DT-CWT using Factorization of Halfband Polynomial," in *The Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics*, Patna, India, Dec. 16-19, 2015.
 39. Sonam Nahar and **Manjunath Joshi**, "A Learned Overcomplete Sparseness and IGMRF Based Regularization Framework For Dense Disparity Estimation," in *3rd Asian Conference on Pattern Recognition*, Kuala Lumpur, Malaysia, Nov. 3-6, 2015. doi: 10.1109/ACPR.2015.7486515
 40. Kamal Captain and **Manjunath Joshi**, "Performance of Wideband Spectrum Sensing Under Fading Channel," in *7th International Workshop on Signal Design and Its Applications in Communications*, Bengaluru, India, Sept. 14-18, 2015. doi: 10.1109/IWSDA.2015.7458397
 41. Milind Padalkar, **Manjunath Joshi** and Nilay Khatri, "Simultaneous inpainting and Super-resolution Using Self-learning," in *26th British Machine Vision Conference*, Swansea, UK, Sept. 7-10, 2015, pp. 105.1-105.12, doi: <https://dx.doi.org/10.5244/C.29.105>
 42. Kamal Captain and **Manjunath Joshi**, "Energy Detection Based Spectrum Sensing Over Fading Channel," in *The 8th International Conference on Communication Systems & NETWORKS*, Bangalore, India, Jan. 5-9, 2016.
 43. **Manish K Gupta** and Krishna Gopal Benerjee, "On dress codes with flowers," in *Proc. Seventh IEEE International Workshop on Signal Design and its Applications in Communications*, Bangalore, Sept. 13-18, 2015, pp. 108-112.
 44. **Manish K Gupta**, Vijay Dhameliya, Dixita Limbachiya and Madhav Khakhar, "On Optimal Family of Codes for Archival DNA Storage," in *Proc. Seventh IEEE International Workshop on Signal Design and its Applications in Communications*, Bangalore, Sept. 13-18, 2015, pp. 143-147. doi: 10.1109/IWSDA.2015.7458386
 45. **Manish K Gupta**, Shalin Shah and Parth Dave, "Computing real numbers using DNA self-assembly," *13th Annual Conference on Foundation Of Nanoscience: Self-Assembled Architecture and Decice*, Utah, USA, Apr. 11-14, 2016.
 46. **Manish K Gupta**, Dixita Limbachiya, Krishna Gopal and Basnari Rao, "Computational algebraic perspectives of DNA codes," in *International School on Computer Algebra COCOA 2016*, Gandhinagar, Feb. 22-26, 2016.
 47. **Rahul Muthu**, Brijesh Patel, Ravi Goyal and Mahipal Jadeja, "A new characterisation of total graphs," in *The 19th Japan-Korea Joint Workshop on Algorithms and Computation WAAC 2016*, Hakodate, Japan, Aug. 30-31, 2016.
 48. **Rahul Muthu** and Mahipal Jadeja Labeled, "Object Treemap: A new technique for visualizing multiple hierarchies," in *The 19th Japan-Korea Joint Workshop on Algorithms and Computation*, Hakodate, Japan, Aug. 30-31, 2016.
 49. Mahipal Jadeja, **Rahul Muthu** and **V Sunitha**, "Set labelling vertices to ensure adjacency coincides with disjointness," in *International Conference on Current Trends in Graph Theory and Computation*, New Delhi, India, Sept. 17-19, 2016.
 50. **Ranendu Ghosh**, "Soil fertility evaluation for fertiliser recommendation using hyperion data," in *Sensors & Models in Photogrammetry & Remote Sensing 2015, ISPRS International Conference*, Kish Island, Iran, Nov. 23-25, 2015. doi: 10.5194/isprsarchives-XL-1-W5-241-2015
 51. Ashish Phophalia, **Suman K Mitra**, "3-D MRI Denoising using Rough Set Theory and kernel Embedding Method," in *Proc. International Workshop on Patch-based Techniques in Medical Imaging LNCS9467*, Oct. 9, 2015, pp. 163-171. doi: 10.1007/978-3-319-28194-0_20



52. Gitam Shikkenawis and **Suman K. Mitra**, "Kernelization of locality preserving discriminant projection," in *2015 Proc. Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics*, Patna, Dec. 16-19, 2015, pp. 1-4. doi: 10.1109/NCVPRIPG.2015.7489993
53. Radhika Patel, **Suman K Mitra**, "Extracting Text from Degraded Document Images," in *IEEE Fifth National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics*, Dec. 16-19, 2015. doi: 10.1109/NCVPRIPG.2015.7490017
54. V. Ravindran, **Ganesh Bagler** and **V Sunitha**, "Controllability of the human cancer signaling network," in *2015 National Network of Mathematical and Computational Biology National Meeting*, Pune, Dec. 27-30, 2015.
55. Sarita Agrawal, Jay Patel and **Manik Lal Das**, "Pairing Based Mutual Healing in Wireless Sensor Networks," in *Proc. Eighth International Conference on Communication, Systems & Networks*, Bangalore, India, Jan. 5-9, 2016, pp. 1-8. doi: 10.1109/COMSNETS.2016.7439985
56. Jay Dave and **Manik Lal Das**, "Securing SQL with Access Control for Database as a Service Model," in *Proc. Second International Conference on Information and Communication Technology for Competitive Strategies*, ACM Press, Udaipur, India, Mar. 4-5, 2016, article no. 104. doi: 10.1145/2905055.2905163
57. Arun Krishnan and **Manik Lal Das**, "Medical Image Security with Cheater Identification Using Secret Sharing Scheme," in *Proc. International Conference on Signal, Networking, Computing, and Systems*, Lecture Notes in Electrical Engineering, vol 395. Springer, New Delhi, Feb. 2016, pp. 117-126. doi: 10.1007/978-81-322-3592-7_12
58. Bhavya Bansal, Ronak Patel and **Manik Lal Das**, "CheckPDF: Check what is Inside before Signing a PDF Document," in *Proc. International Conference on Signal, Networking, Computing, and Systems*, Lecture Notes in Electrical Engineering, vol 395. Springer, New Delhi, Feb. 2016, pp. 75-85. doi: 10.1007/978-81-322-3589-7_8
59. Sarita Agrawal, **Manik Lal Das**, **Anish Mathuria** and **Sanjay Srivastava**, "Program Integrity Verification for Detecting Node Capture Attack in Wireless Sensor Network," in *Proc. of the International Conference on Information Systems Security*, Dec. 16-20, 2015, LNCS, vol. 9478, Springer, Kolkata, India, pp. 419-440. doi: 10.1007/978-3-319-26961-0_25
60. Payal Chaudhari, **Manik Lal Das**, and **Anish Mathuria**, "On anonymous attribute based encryption," in *Proc. International Conference on Information Systems Security*, Dec. 16-20, 2015, LNCS, vol. 9478, Springer, Kolkata, India, pp. 378-392. doi: 10.1007/978-3-319-26961-0_23
61. Punit Mehta, Jigar Sharda and **Manik Lal Das**, "SQLshield: Preventing SQL Injection Attacks by Modifying User Input Data," in *Proc. International Conference on Information Systems Security*, Dec. 16-20, 2015, LNCS, vol. 9478, Springer, Kolkata, India, pp. 192-206. doi: 10.1007/978-3-319-26961-0_12
62. **Manish Narwaria**, M. Perreira Da Silva, and P. Le Callet, "Study of High Dynamic Range Video Quality Assessment," in *Proc. SPIE, Applications of Digital Image Processing XXXVIII*, Sept. 22, 2015, article no. 95990V. doi: 10.1117/12.2189178
63. L. Krasula, **Manish Narwaria**, K Fliegel and P. Le Callet, "Rendering of HDR content on LDR displays: An objective approach," in *Proc. SPIE, Applications of Digital Image Processing XXXVIII*, Sept. 22, 2015, article no. 95990X. doi: 10.1117/12.2186388
64. **Puneet Bhateja**, "Designing Distributed Systems wrt to Conformance," in *Asia Pacific Software Engineering Conference*, New Delhi. Dec. 1-4, 2015. doi: 10.1109/APSEC.2015.1
65. Manish Chaturvedi and **Sanjay Srivastava**, "Edge-Level Real-Time Traffic Estimation with

- Limited Infrastructure,” in *Proc. 2015 IEEE 82nd Vehicular Technology Conference (VTC-Fall)*, Boston, MA, Sept. 6-9, 2015, pp. 1-5. doi: 10.1109/VTCFall.2015.7390906
66. **Shweta Rao Garg**, “Adaptation, Appropriation and Affect in Nina Paley’s Sita Sings the Blues,” in *National Conference on Knowledge, Power, Affect: Feminism in Social Discourse and Practice*, Ahmedabad, Sept. 4-5, 2015.
67. Mohnish Dubey, **Sourish Dasgupta**, Ankit Sharma, Konrad Höffner, Jens Lehmann, “AskNow: A Framework for Natural Language Query Formalization in SPARQL,” in *Proc. 13th International Conference, ESWC 2016*, Heraklion, Crete, Greece, May 29 - June 2, 2016, Lecture Notes in Computer Science, vol. 9678. Springer, pp. 300-316.
68. **Yash Agrawal**, Rajeevan Chandel and Mekala Girish Kumar, “Performance analysis of multilayer graphene nano-ribbon in current-mode signaling interconnect system,” in *Proc. IEEE International Symposium on Nanoelectronics Information Systems*, Indore, Madhya Pradesh, Dec. 21-23, 2015, pp. 297-302. doi: 10.1109/iNIS.2015.44
69. Mekala Girish Kumar, Rajeevan Chandel and **Yash Agrawal**, “Timing and stability analysis of carbon nanotube interconnects,” in *Proc. IEEE International Symposium on Nano electronics Information Systems*, Indore, Madhya Pradesh, Dec. 21-23, 2015, pp. 308-313. doi: 10.1109/iNIS.2015.43
70. **Yash Agrawal**, Mekala Girish Kumar and Rajeevan Chandel, “Time-domain analytical modeling of current-mode signaling bundled single-wall carbon nanotube interconnects,” in *Proc. Springer International Conference on Intelligent Computing and Applications*, P. Deiva Sundari, Subhransu Sekhar Dash, Swagatam Das, Bijaya Ketan Panigrahi Eds., Springer, Feb., 2016, pp. 1-9. doi: 10.1007/978-981-10-1645-5_1
71. Mekala Girish Kumar, **Yash Agrawal** and Rajeevan Chandel, “Stability analysis of carbon nanotube interconnects,” in *Proc. Springer International Conference on Intelligent Computing and Applications*, P. Deiva Sundari, Subhransu Sekhar Dash, Swagatam Das, Bijaya Ketan Panigrahi Eds., Springer, Feb., 2016, pp. 11-19. doi: 10.1007/978-981-10-1645-5_2

Patents

1. R. Gopal, S. Kay, J. Lykins, C. Ravishankar and **Yash Vasavada**, “System and Architecture for Space-based and Mobile Terrestrial Sensor Vehicles and End-to-End Network for Aggregation and Processing of Sensor Data,” U.S. Patent 20 150 318 916, Nov., 2015.
2. **Yash Vasavada**, C. Ravishankar, D. Arur and M. Parr, “Apparatus and Method for Network Level Synchronization in Multiple Low Earth Orbit (LEO) Satellite Communications Systems,” U.S. Patent 20 150 270 890 A1, Sept., 2015.
3. N. **BenAmmar**, D. Arur, C. Ravishankar, and **Yash Vasavada**, “Apparatus and Method for Efficient Handover for Low Earth Orbit (LEO) Satellite Systems,” U.S. Patent 20 150 271 730, Feb., 2016..





Awards and Professional Activities

The faculty and staff continued to be actively involved in international, national, state and local level professional activities and made significant contributions at all levels. They also received

fellowships, and presented a large number of invited talks all over the country and abroad. Below is a listing of the major recognitions and activities of the faculty and staff of the Institute:

HONORARY WORK/POSITIONS HELD ON PROFESSIONAL BODIES

Prof R. Nagaraj

- Mentor Director, Indian Institute of Information Technology, Vadodara
- Member, Regional Advisory, Group on Social Entrepreneurship Education, Gujarat
- Member, Executive Committee, Institute of Seismological Research, Gujarat
- Independent Director, Gujarat Informatics Limited
- Member, Academic Council, Ganpat University, Mehsana, Gujarat
- Member, Governing Council, Electronics and Quality Development Centre, Gandhinagar
- Member, Executive Council, Electronics and Quality Development Centre, Gandhinagar

Prof Anil K Roy

- Member-at-Large, IEEE Sensors Council, 2015-16
- Treasurer, IEEE India Council, 2015-16
- Member, IEEE Global Strategy AdHoc Committee, 2015
- Member, CII Gujarat Taskforce, 'Smart City Gandhinagar Project,' Government of Gujarat
- Member, Technical Committee on 'Smart City Gandhinagar Project,' Government of Gujarat
- Member, Cyber Security Committee, Raksha Shakti University, Ahmedabad
- Member, Board of Studies, Computer Science & Technology and Faculty of Computer Science & Technology of Institute of Forensic Science, Gujarat Forensic Sciences University, Gandhinagar
- Member, Board of Studies, Marwadi University, Rajkot

Prof Anish Mathuria

- Member, Board of Governors, Gujarat Industrial Research Development Agency, Government of Gujarat

- Finance Chair, IEEE CIS Winter School, 01-05 Mar. 2016

Prof Alka Parikh

- Regional committee member, Western India for GEF-UNDP Small Grants Program
- Board of Governors, CSS, Surat
- Trustee, Utthan Trust, Vastrapur, Ahmedabad
- Joint Director, Uplift India Association

Prof Asim Banerjee

- Member of Jury, the Diploma Projects of PG students, National Institute of Design (NID) Gandhinagar and Ahmedabad
- Member, Board of Studies, Nirma University
- Member, Faculty of Engineering, Nirma University
- Member, Board of Studies, UV Patel College of Engineering, Ganpat University
- Member, Faculty of Engineering-Computer Science and Engineering, UV Patel College of Engineering, Ganpat University

Prof Bhaskar Chaudhury

- Member and Contributor, the International Plasma Data Exchange Project

Prof Hemant A Patil

- Member, International Speech Communication Association
- Member, IEEE, USA
- Member, IEEE Signal Processing Society, USA
- Affiliate Member, IEEE, the Speech and Language Technical Committee
- Member, IEEE Circuits and Systems Society, USA
- Member, International Association for Engineers
- Life member, System Society of India

Prof Manik Lal Das

- Chair, IEEE Computer Society, Gujarat Chapter
- Secretary, IEEE Gujarat Section

Prof Sanjeev Gupta

- Member, Senate, IIIT Vadodara
- Executive Council Member, DA-IICT Centre for Entrepreneurship and Incubation
- Vice Chairperson of Research Council, IIIT Vadodara
- Member, Committee for Government of Gujarat approved DA-IICT as Nodal Institute under its Start-up / Innovation Scheme
- Member, Advisory Committee, PG Research Center for Mobile Computing & Wireless Technologies, Gujarat Technological University, Ahmedabad
- Member, Board of Studies, Charotar University of Science and Technology, Changa, Gujarat
- Member, Board of Studies for Satellite Communications Course conducted by Centre for Space Science and Technology Education in Asia and the Pacific, IIRS Campus, Dehradun (Headquarters) & SAC Campus, Ahmedabad
- Member, Board of Governors, Government Engineering College, Gandhinagar
- Member, Academic Council, CU Shah University, Wadhwan City, Surendranagar District, Gujarat
- Member, Board of Studies, Indus University, Ahmedabad
- Member, Board of Studies, LDRP Institute of Technology and Research, Kadi Sarva Vishwavidyalaya, Gandhinagar
- Coordinator, cooperation with SAC under the MoU for cooperation in research and academic activities, Space Applications Centre, ISRO, Department of Space, Government of India Ahmedabad
- Expert Member, Committee for Techno-Commercial Evaluation of 220 GHz Vector Network Analyzer, Institute of Plasma Research, Department of Atomic Energy, Government of India, Ahmedabad
- Member, 'Antenna Test and Measurement Association'
- Member, Agilent's Test Advisory Panel

Prof Suman K Mitra

- IEEE Gujarat Section, Chair Educational Activity
- Joint Secretary, Indian Unit of Pattern Recognition and Artificial Intelligence
- External Expert, Project Progress Committee of a DST Sponsored project at DDU, Feb. 2016

Prof V Sunitha

- Member, Board of Studies, Pandit Deendayal Petroleum University, Gandhinagar

Prof Vishvajit Pandya

- Honorary Director, Andaman and Nicobar Tribal Research Institute, Port Blair
- Member, the general body of the Andaman Adim Jan Jati Sevak Samite
- Member, the special advisory committee of the Lieutenant Governor of the Andaman Islands
- Contributing member, the Andaman and Nicobar Administration Heritage Committee

FELLOWSHIPS/VISITING SCHOLAR**Prof Suman K Mitra**

- Visiting Professor, University of Dayton, Ohio, USA, June-July 2016

JOURNAL EDITORSHIP**Prof Hemant A Patil**

- Member, Editorial Board, Engineering Letters, International Journal

Prof Sanjeev Gupta

- Member, Editorial Board, International Journal on Science and Technology, ISSN: 2229-7677
- Member, Editorial Board, International Journal of Engineering and Technology Management, Bi-monthly on-line journal published from Iran

Prof Suman K Mitra

- Associate Editor, International Journal on Image and Graphics by World Scientific



Prof Rutu Parekh

- Member, Editorial Board for Journal of Electrical and Electronic Engineering, Science

REVIEWING

Book/Book Chapter Reviewing

Prof Deepak Ghodgaonkar

- Reviewed chapters of book on 'Principles of Electromagnetics' by S. C. Mahapatra and Sundipta Mahapatra, ISBN-13: 9789332901605, McGraw-Hill Education, India, 2nd edition, Dec. 2015

Prof Laxminarayana Pillutla

- Reviewed the monograph, 'Fundamentals of Complex Networks: Models, Structures and Dynamics,' G. Chen, X. Wang and X. Li, Wiley, Hoboken, 2015, ISBN: 9781118718117. Computing Review # CR144676 (1611-0798) 09, Aug. 2016

Prof Manish K Gupta

- Reviewed Book, 'Polynomial theory of error correcting codes,' Cancellieri G., Springer, New York, 2014, ISBN:9783319017266. Computing Reviews # CR143706 (1511-0935) 19 Aug. 2015
- Reviewed Book, 'Raspberry Pi User Guide (3rd ed.),' Upton E., Halfacree G., Wiley, Chichester, UK, 2014, ISBN:9781118921661. Computing Reviews # CR143989 (1602-0085) 2 Dec. 2015
- Reviewed Book, 'Math bytes : Google Bombs, Chocolate-covered Pi, and other Cool Bits in Computing,' Chartier T., Princeton University Press, Princeton, NJ, 2014. ISBN:9780691160603. Computing Reviews # CR144287 (1606-0390) 5 Apr. 2016
- Reviewed Book, 'Algebraic Coding Theory : revised edition,' Berlekamp E., World Scientific Publishing Co, River Edge, NJ, 2015. Computing Reviews # CR144523 (1609-0630) 22 June 2016

Journal Paper Reviewing

Prof Alka Parikh

- International Journal of Rural Management, *SAGE*

Prof Anil K Roy

- IEEE Sensors Journal, *IEEE*
- IEEE Transaction on Industrial Electronics, *IEEE*

Prof Bhaskar Chaudhury

- Physics of Plasmas, *American Institute of Physics Publishing*
- IEEE Transactions on Plasma Science, *IEEE*
- IEEE Transactions on Microwave Theory and Techniques, *IEEE*
- Journal of Electromagnetic Waves and Applications, *Taylor & Francis*
- Journal of Applied Physics, *American Institute of Physics Publishing*
- Plasma Sources Science and Technology, *Institute of Physics*

Prof Biswajit Mishra

- Journal of the Institution of Engineers, *Springer*
- Sensors and Actuators, *Elsevier*

Prof Deepak Ghodgaonkar

- IEEE Transactions on Instrumentation and Measurement, *IEEE*
- IEEE Transactions on Microwave Theory and Techniques, *IEEE*
- IEEE Transactions on Antennas and Propagation, *IEEE*

Prof Ganesh Bagler

- Physica A, *Elsevier*
- Molecular Biosystems, *Royal Society of Chemistry*

Prof Manik Lal Das

- IEEE Transactions on Cloud Computing, *IEEE*
- IEEE Transactions on Knowledge and Data Engineering, *IEEE*
- IEEE Transactions on Vehicular Technology, *IEEE*

Prof Manish K Gupta

- IEEE Communications Letter, *IEEE*
- Journal of Applied Mathematics and Computing, *Springer*
- Discrete Mathematics, *Elsevier*
- Applicable Algebra in Engineering, Communication and Computing, *Springer*
- ACM Computing Surveys, *Association for Computing Machinery*
- International Journal of Biomathematics, *World Scientific Publishing Co Pte Ltd*
- ACM Computing Reviews Journal, *Association for Computing Machinery*

Prof Manish Narwaria

- IEEE Transactions on Image Processing, *IEEE*
- IEEE Journal of Selected Topics in Signal Processing, *IEEE*
- IEEE Transactions on Circuits and Systems for Video Technology, *IEEE*
- Elsevier Signal Processing: Image Communication, *Elsevier*
- IEEE Computer Graphics and Applications, *IEEE*

Prof Manjunath V Joshi

- Transactions on image processing, *IEEE*
- Computer Vision and Image Understanding, *Elsevier*
- Transactions on Vehicular Technology, *IEEE*

Prof Minal Bhise

- Knowledge and Information Systems, *Springer*

Prof Nabin Kumar Sahu

- American Mathematical Society review, *American Mathematical Society*
- Acta Mathematica Sinica, English series, *Springer*

Prof Prasenjit Majumder

- ACM TALIP, *IPM Elsevier*

Prof Rutu Parekh

- Microelectronics Journal, *Elsevier*
- Journal of Electrical and Electronic Engineering, *Science Publishing Group*
- IEEE Access, *IEEE*

Prof Rajib Lochan Das

- IEEE Transactions on Signal Processing, *IEEE*
- IEEE Transactions on Circuits and Systems, *IEEE*
- Express Briefs Circuits, Systems, and Signal Processing, *Springer*

Prof Sanjeev Gupta

- Journal of Electromagnetic Waves and Applications, *Taylor & Francis*
- Progress in Electromagnetic Research, *EMW Publishing*
- International Journal of Applied Electromagnetics and Mechanics, *IOS Press*
- IET Circuits, Devices and Systems Journal, *IEEE*
- Indian Journal of Physics, *Springer*
- Journal of the Indian Institute of Science, *Springer*
- Iranian Journal of Electrical and Computer Engineering, *Springer*
- International Journal on Science and Technology, *IJSAT*
- Journal of Communication Technology, *ICTACT*
- ADIT Journal of Engineering, *A.D. Patel Institute of Technology*

Prof Yash Agrawal

- IEEE Transactions on Electromagnetic Compatibility, *IEEE*
- Journal of Circuits, Systems, and Computers, *World Scientific Publishing Co Pvt. Ltd*
- COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, *Emerald*



Conference-Paper Reviewing

Prof Anil K Roy

- IEEE Sensors 2016, Orlando, FL, USA, 30 Oct.-03 Nov. 2016

Prof Asim Banerjee

- National Conference on Communication, Guwahati, Assam, 4-6 Mar. 2016
- IEEE International Conference on Current Trends in Advanced Computing, Bangalore, 10-11 Mar. 2016

Prof Anish Mathuria

- Eleventh International Conference on Information System Security, Kolkata, 16-20 Dec. 2015

Prof Hemant A Patil

- Forum for Information Retrieval Evaluation, DA-IICT Gandhinagar, 04-06 Dec. 2015
- INTERSPEECH 2015, Dresden, Germany, 06-10 Sept. 2015
- EUSIPCO 2015, Nice, France, 31 Aug.-04 Sept. 2015

Prof Manish Narwaria

- The 2016 IEEE International Conference on Multimedia and Expo, Seattle, USA, 11-15 July 2016
- ACM International Conference on Multimedia System, Klagenfurt, Austria, 10-13 May 2016
- IEEE International Conference on Visual Communications and Image Processing, VCIP, Chengdu, China, 27-30 Nov. 2016

Prof Minal Bhise

- Fifth Nirma University International Conference on Engineering, Nirma University, Ahmedabad, 26-28 Nov. 2015

Prof Pokhar M Jat

- International Conference on Computing Communication and Automation, Greater Noida, India, 29-30 Apr. 2016

Prof Prasenjit Majumder

- The 38th Annual ACM SIGIR Conference 2015, 9-13 Aug. 2015
- Conference and Labs of the Evaluation Forum, Toulouse, France, 8-11 Sept. 2015
- The Third International Conference on Mining Intelligence and Knowledge Exploration, IIIT, Hyderabad 9-11 Dec. 2015
- Forum for Information Retrieval Evaluation, DA-IICT, Gandhinagar, 4-6 Dec. 2015

Prof Puneet Bhateja

- ACM Symposium on Applied Computing-Track Software Verification and Testing, Pisa, Italy, 3-8 Apr. 2016

Prof Rutu Parekh

- The Grace Hopper Celebration of Women in Computing Houston, Texas, 19-21 Oct. 2016

Prof Sanjay Srivastava

- Eighth International Conference on Communication Systems and Networks, IEEE, Bangalore, 5-10 Jan. 2016

Prof Sanjeev Gupta

- Fifth Nirma University International Conference on Engineering, Nirma University, Ahmedabad, 26-28 Nov. 2015
- Twelfth IEEE India International Conference on Electronics, Energy, Environment, Communication, Control, INDICON-2015, IEEE India Council, New Delhi, 17-20 Dec. 2015
- International Conference on Computers, Communication and Computational Sciences, Aryabhatta College of Engineering and Research Centre, Ajmer, 12-13 Aug. 2016

INVITED LECTURES/TALKS/COURSES

Prof Aditya Tatu

- 'Inverse Problems,' CHARUSAT, Nov. 2015

Prof Alka Parikh

- 'Course on Economics at IIIT,' Vadodara, July-Dec. 2015

- Sessions on 'Qualitative and Quantitative Research Methodologies' KSP Women's Study Center, University of Pune, 12-13 Aug. 2015
- Talk given for TEDx DA-IICT 'Food Security,' 21 Feb. 2016

Prof Anil K Roy

- 'Cyber Security: Can Intruders Enter Through Hardware?,' Cyber Security Workshop 2015, Bengaluru, 23 Aug. 2015
- 'Internet of Things: an evolutionary shift from Human2Machine to Machine2Machine and all machines are intelligent,' Invited talk at MBICT, New Vallabh Vidyanagar, Gujarat, 10 Aug. 2015

Prof Anish Mathuria

- Malware, phishing, and other online security threats, Space Application Centre, ISRO, Ahmedabad, 14 Aug. 2015

Prof Bhaskar Chaudhury

- Twenty Seventh IUPAP Conference, 'Computational Physics: CCP2015,' IIT Guwahati, India, Dec. 2015

Prof Bharani Kollipara

- 'Interpreting the Thinkers of the Past: Problems and Prospects,' Guest lecture at the Central University of Gujarat, 22 Feb. 2016

Prof Biswajit Mishra

- 'Autonomous Systems with Micro Energy Harvesters for Animal Health Monitoring,' National Dairy Development Board, Anand, Gujarat, Aug. 2016

Prof Deepak Ghodgaonkar

- 'Microwave NDT,' ISTE Short Term Training Program, 'Recent Trends in Communication Engineering,' Nirma University, Ahmedabad, 18 Dec. 2015

Prof Ganesh Bagler

- "Modeling interconnected systems with complex networks paradigm" and "Drug Discovery with systems biological approach," Government Women Engineering College, Ajmer, 4 Oct. 2015

- "Introduction to Systems Biology" and "Application of Graph Theoretical Modeling for Analysis Biological Complex Systems," 4th SERC School in Nonlinear Dynamics, Manipur University, Imphal, 5-8 Dec. 2015

Prof Hemant A Patil

- 'Speech Source Modelling and Its Application,' Summer School, DA-IICT Gandhinagar, 04-08 July, 2016
- 'Spoofing Attacks in Voice Biometrics,' Conference of Signal Processing, CCOE, Pune, 10 June 2016
- 'Signal Processing and Random Process' and interaction with faculty and students, Dept. of ECE, RGCER (academic college), a part of Meghe Group of Institutions (MGI), Nagpur, 22-23 Jan. 2016
- 'Introduction to Speech Signal Processing and Applications,' U. V. Patel College of Engineering, Ganpat University, Kherva, 21 Jan. 2016
- 'Advances in Signal Processing and Communication Technology' GUJCOST sponsored workshop, EC department of Charotar University of Science & Technology, Changa, 31 Oct. 2015
- 'Introduction to Signal and Speech Processing,' CSE Department, Nirma University, 20 Aug. 2015
- Visiting faculty, IIIT Vadodara, BTech. Semester-III core course 'System and Signal Theory,' Autumn Semester 2015
- Visiting faculty, IITRAM, Ahmedabad, BTech. Semester-III core course 'Signals and Systems,' Autumn Semester 2015
- Visiting faculty, IIIT Vadodara, BTech. Semester-VI science elective course 'Speech Science and Technology,' Winter 2016

Prof Laxminarayana Pillutla

- 'Statistical Signal Processing,' CEP course conducted, for ISRO-SAC Scientists, DA-IICT, Gandhinagar, 8-12 Mar. 2016
- 'Optimal Filtering and Parameter Estimation Techniques for Statistical Models,' tutorial delivered at International Symposium on WPMC 2015, Hyderabad, India, 13 Dec. 2015



Prof Manik Lal Das

- Teaching courses, IIIT, Vadodara

Prof Manish K Gupta

- 'Some Interdisciplinary Emerging Opportunities in Science and Technology,' Centre for Interdisciplinary Studies in Science and Technology, Sardar Patel University, 4 Mar. 2016

Prof Manjunath V Joshi

- ITPAR workshop held at IIT Bombay, 16-18 Apr. 2016

Prof Mukesh Tiwari

- Impact decimation through two and three dimensional granular arrangement, Workshop on 'Nonlinear Dynamics of Many Body Systems,' SUNY at Buffalo, New York, 3 Apr. 2016

Prof Minal Bhise

- Taught Internet Technology in Knowledge Society, UG Core course, IIIT, Vadodara during Autumn, 2015-16

Prof Naresh Jotwani

- 'Some Design Considerations for Embedded Systems,' STTP, 'VLSI and Embedded System Design,' Nirma Institute of Technology, Ahmedabad, 29 June 2016
- 'Applications of Computer & Communication Technology in Solar PV Pump Controller,' the RACST Conference, G H Patel College of Engineering & Technology, Vallabh Vidyanagar, 4 Oct. 2016

Prof Pokhar M Jat

- 'Big Data,' AD Patel Institute of Technology, Vallabh Vidya Nagar, Anand, July 2016
- 'Introduction to Semantic Web,' Vadodara Institute of Engineering, Vadodara, India, Dec. 2015

Prof Prasenjit Majumder

- Information Retrieval Evaluation for Indian Languages: FIRE 2015, DA-ICT, Gandhinagar, 4-6 Dec. 2015

- Entity ranking, Indian Statistical Institute, Kolkata, 2015
- Indian language text searching: TIFAC, New Delhi

Prof Ranendu Ghosh

- RS & GIS Applications for Rural Development and Hyperspectral Remote Sensing, ISTAR, 9 Dec. 2015, Winter School on 'Geospatial Technologies,' 23 Nov.-12 Dec. 2015

Prof Rutu Parekh

- 'Introduction to Nanoscience and Nanotechnology' and 'Microelectronics to Nanoelectronics' Government Engineering College, Rajkot under Technical Education Quality Improvement Program of Government of India, 6 Apr. 2016

Prof Sanjay Srivastava

- Computational Intelligence in Internet of Things, IEEE CIS Winter School, 1-5 Mar. 2016
- 'Wireless Sensor Networks: Applications, Protocols, Simulation,' Nirma University, 18 Dec. 2015
- An Overview of IoT Research, Workshop on Recent trends in Internet of Things (IoT), CHARUSAT, 18 Sept. 2015

Prof Sanjeev Gupta

- 'Microwave System Design,' EC Department, Charotar University of Science and Technology, Changa, Gujarat, 16 Sept. 16, 2015
- 'Basics of Antennas' ISTE Approved Short Term Training Program, 'Recent Trends in Communication Engineering,' Institute of Technology, Nirma University, 16 Dec. 2015
- 'RF and Microwave Engineering—Emerging Areas,' LD College of Engineering, Gujarat Technological University, Ahmedabad, 12 Feb. 2016

Prof Shweta Garg

- Gender Sensitization, GLS University, July 2016
- Creative Writing Workshop, SM Patel Institute of Commerce, GLS University, Ahmedabad, 23-24 Feb. 2016

- Dramatics workshop Foundation Program at IITRAM, Ahmedabad, 10 Aug. 2015
- Dramatics and Communication, Expert Lecture, Student Development Program, English Department, Central University Gujarat, 7 Aug. 2015
- Business Communication Skills Course, Management Development Program, School of Petroleum Management, PDP, Gandhinagar, July-Aug. 2015

Prof Suman K Mitra

- 2016 IEEE CIS winter School, DA-IICT, Gandhinagar, Mar. 2016
- Annual Day Workshop of Machine Intelligence Unit, ISI, Kolkata, Mar. 2016
- The TCS Innovation Lab, Kolkata, Mar. 2016
- The IEEE, NAECON, The University of Dayton Ohio, University of Dayton Research Institute, Ohio, USA, July 2016

Prof Vishvajit Pandya

- 'Thinking Forests': New Perspectives on Natural and Cultural Conservation, Bombay Natural History Society, Pench Tiger Reserve, 16 May 2016

CONFERENCE/WORKSHOP SESSION CHAIR (CONFERENCES/WORKSHOP PARTICIPATION)

Prof R. Nagaraj

- 7th Annual Oracle Users Group Conference, Hyderabad International Convention Centre, Hyderabad, 21-22 Nov. 2015

Prof Amishal Modi

- Global Association of English Studies Conference, Anand, Gujarat, 04-06 Feb. 2016
- Conference 'City Lives: Spaces and Narratives,' Paper Title: 'Sexuality and the City,' The Maharaja Agrasen College, Delhi University, Mar. 2016

Prof Anil K Roy

- IEEE SENSORS 2015, Busan, South Korea, 1-4 Nov. 2015
- IEEE International Ultrasonics Symposium, Taipei, Taiwan, 21-24 Oct. 2015

Prof Anish Mathuria

- Tenth Inter-Research-Institute Student Seminar, 'Computer Science,' Trivandrum, 21 Jan. 2016

Prof Bhaskar Chaudhury

- The 30th IEEE International Parallel & Distributed Processing Symposium, Chicago, USA, 23 May 2016
- Twent Seventh IUPAP Conference on 'Computational Physics,' IIT Guwahati, India, 2-5 Dec. 2015

Prof Biswajit Mishra

- Organiser, Workshop on Patent and IPR Awareness with TIFAC, DST

Prof Deepak Ghodgaonkar

- International Workshop Antenna Innovations and Modern Technologies, Hotel Pride, Ahmedabad, 26-27 Dec. 2015

Prof Hemant A Patil

- International Conference on Signal Process and Communication, IISc Bangalore, 12-15 June 2016
- The 41st IEEE International Conference on Acoustics, Speech and Signal Processing, Shanghai, China, 21-25 Mar. 2016
- Winter School on Speech and Audio Processing 2016, Chennai, 8-11 Jan. 2016
- INTERSPEECH 2015, Dresden, Germany, 6-10 Sept. 2015
- Twenty Third European Signal Processing Conference, Nice, France, 31 Aug.-04 Sept. 2015
- Eighteenth International Conference on Text, Speech and Dialogue, Lecture Notes in Artificial Intelligence, Springer, Plzen, Czech Republic, 14-17 Sept. 2015



- Twenty Third European Signal Processing Conference, Nice, France, 31 Aug.-4 Sept. 2015
- First International Workshop, the History of Speech Communication Research, Dresden, Germany, 05 Sept. 2015
- Tutorial on Phase Estimation: From Theory to Practice, INTERSPEECH 2015, Dresden, Germany, 06 Sept. 2015.
- International Workshop, 'Speech Robotics,' Dresden, Germany, 11 Sept. 2015
- DeitY ASR Phase-II workshop and PI meeting, IIT Madras, 08-09 June 2016
- DeitY TTS Phase-II PI meeting, WiSSAP 2016, SSNCOE, Chennai, 08-11 Jan. 2016

Prof Laxminarayana Pillutla

- The International Symposium on Wireless Personal Multimedia Communications 2015, Hyderabad, India, 13-16 Dec. 2015

Prof Madhumita Mazumdar

- National Conference, State and Society in pre-colonial India, 'Debates on the identity of Mastani and the politics of caste and gender in the Maratha Peshwai,' the Department of History, University of Calcutta, Calcutta, 9 Feb. 2016

Prof Manik Lal Das

- World Summit, Accreditation, National Board of Accreditation, 18-20 Mar. New Delhi, 2016

Prof Manish K Gupta

- Start-up India Stand-up India, National Event, New Delhi, 16 Jan. 2016
- IEEE International Workshop, Signal Design and its Applications in Communications, IISc Bangalore, 13-18 Sept. 2015

Prof Minal Bhise

- Winter School on Computational Intelligence, Mar. 2016
- DA-IICT-TCS Seminar Series –II, DA-IICT, Gandhinagar, Aug. 2015

Prof Mukesh Tiwari

- Nonlinear Dynamics of Many Body Systems SUNY, Buffalo, New York, 1-4 Apr. 2016

Prof Prasenjit Majumder

- The 7th meeting of Forum for Information Retrieval Evaluation 2015, DA-IICT, Gandhinagar, 4-6 Dec. 2015

Prof Puneet Bhateja

- Asia Pacific Software Engineering Conference, New Delhi, 1-4 Dec. 2015

Prof Rahul Dubey

- ARMTechCon, Santa Clara, CA, USA, 10-12 Nov. 2015
- Xilinx Software based Design, San Jose, CA, USA, Feb. 2016
- IoT World, Santa Clara, CA, USA, May 2016
- SilverSpring Network Developer meet, San Jose, CA, USA, 06 June 2016
- SemiCon West, San Francisco, CA, USA, 11 July 2016

Prof Rahul Muthu

- Workshop on Algorithms and Computation 2016, Hakodate, Japan, 30-31 Aug. 2016
- 'International Conference on Current Trends in Graph Theory and Computation,' Delhi, India 17-19 Sept. 2016

Prof Ranendu Ghosh

- Sensors & Models in Photogrammetry & Remote Sensing 2015, ISPRS International Conference, Kish Island, Iran, 23-25 Nov. 2015

Prof Sanjeev Gupta

- 'Integrated Active Antennas' Workshop on 'Advances in Signal Processing and Communication Techniques,' Charotar University of Science and Technology, Changa, Gujarat, 31 Oct. 2015
- 'Wireless System Design – Issues and Challenges', Workshop on 'Advances in Signal Processing and Communication Techniques,' Charotar University of Science and Technology, Changa, Gujarat, 1 Nov. 2015

Prof Suman K Mitra

- National Conference on Computer Vision Pattern Recognition, Image Processing and Graphics, IIT, Patna, 16-19 Dec. 2015

Prof Yash Agrawal

- IEEE International Symposium, 'Nano electronics Information Systems,' Indore, Madhya Pradesh, 21-23 Dec. 2015
- Springer International Conference on Intelligent Computing and Applications, KCA College of Technology, Karapakkam, Chennai, Tamil Nadu, 05-06 Feb. 2016
- One week short term course, Advances in Design Techniques for Low Power VLSI and MEMS Systems, NIT, Hamirpur, 18-23 July 2016

CONFERENCE PROGRAM COMMITTEE**Prof R. Nagaraj**

- Organizing Chair, IEEE-CIS Winter School on 'Research Trends in Computational Intelligence-Theory & Applications,' 01-05 Mar. 2016
- Member, Organizing Committee of Summer School, 'Speech Signal Processing,' 04-08 July 2016
- Member, Summer School, 'Advances in Speech and Audio Processing,' 19-20 July 2016

Prof Anil K Roy

- 2016 IEEE Computational Intelligence Society Winter School, Gandhinagar, 01-05 Mar. 2016
- New Trends in Signal Processing, Gandhinagar, 03-04 Oct. 2015
- National Workshop, 'Cyber Security 2015,' Bengaluru, 22-23 Aug. 2015

Prof Anish Mathuria

- Member, Program Committee, '11th International Conference on Information System Security,' Kolkata, 16-20 Dec. 2015

Prof Biswajit Mishra

- TPC and Session Chair, IEEE VLSI-SATA, Bangalore, 8-10 Jan. 2015

- Thirteenth International IEEE India Conference, INDICON 2016, Bengaluru, India, 16-18 Dec. 2016

Prof Deepak Ghodgaonkar

- Member, Technical Program Committee, 2016 International Conference on Internet of Things and Applications, Maharashtra Institute of Technology, Pune, India, 22-24 Jan. 2016

Prof Hemant A Patil

- Member, Technical Committee, EUSIPCO 2015, 31 Aug.-04 Sept. 2015
- Chair, Organizing Committee, Summer School on Speech Source Modelling and Its Applications, DA-IICT, Gandhinagar 04-08 July 2016
- Chair, organizing committee, Summer School on Advances in Speech and Audio Processing: From Representations and Models to Applications, DA-IICT Gandhinagar, 19-20 July 2016

Prof Manik Lal Das

- Coordinator, Workshop on Big Data Analytics, DA-IICT, Gandhinagar, 04 Dec. 2015
- Coordinator, PCE on Cyber Security, DA-IICT, Gandhinagar, 19 June-24 July 2016
- Member, Organizing committee, IEEE CIS Winter School 2016 on 'Emerging Research Trends in Computational Intelligence – Theory and Applications,' DA-IICT, Gandhinagar, 01-05 Mar. 2016

Prof Manish K Gupta

- Coordinator, Organizing Committee, TIFAC Patent and IPR Awareness Workshop, DA-IICT, Gandhinagar, 11 July 2015

Prof Manish Narwaria

- ACM International Conference on Multimedia System, Klagenfurt, Austria, 10-13 May 2016

Prof Minal Bhise

- Subject Expert Member, Research Progress Committee, Nirma University, Ahmedabad
- External Expert, Selection Committee, Computer Science, INFLIBNET, IUC of UGC, MHRD



Prof Prasenjit Majumder

- Co-ordinator, Forum for information Retrieval Evaluation, DA-IICT, Gandhinagar, 04-06 Dec. 2015

Prof Rutu Parekh

- Member, Technical Program Committee, International Academic Conference on Computer, Networks and Communication Technology, Xiamen, China, 16-18 Dec. 2016
- Member, Program Committee, 2016 International Conference on Electrical Engineering and Industrial Engineering, Shanghai, China. 11-12 Dec. 2016
- Committee Member, The Grace Hopper Celebration of Women in Computing, Houston, Texas, 19-21 Oct. 2016
- Member, Program Committee, World Congress on Mechanical and Electrical Engineering, Jinan, China, 25-26 Oct. 2016
- Member, Program Committee, International Conference on Electronic Engineering and Computer Science, Hangzhou, China, 25-26 Apr. 2016
- Member, Program Committee, International Conference on Electrical Engineering, Mechanical Engineering, Hangzhou, China, 25-26 Apr. 2016
- Member, Program Committee, International Conference on Electrical Engineering and Industrial Engineering, Hangzhou, China, 12-13 Dec. 2015

Prof Sanjeev Gupta

- Member, National Advisory Council, 4th National Conference on Innovation and Emerging Technologies, SR Patel Engineering College, District Mehsana, Gujarat, 02-03 June 2016
- Member, Program Committee, International Conference on Computers, Communication and Computational Sciences, Aryabhatta College of Engineering and Research Centre, Ajmer, 12-13 Aug. 2016

Prof Suman K Mitra

- General Chair, Two Day National Seminar, 'New Trends in Signal Processing,' 3-4 Oct. 2015
- Member, Technical Program Committee, 'International Conference on Computer Vision & Image Processing, IIT Roorkee,' 26-28 Feb. 2016
- Chair, Program Committee, IEEE CIS Winter School, Mar. 2016

SPONSORED RESEARCH PROJECTS

Prof Anil K Roy

- Principal Investigator, 'Certification testing for Smart City-Gandhinagar, 2016,' funded by (n)Code Solutions, a Division of Gujarat Narmada Valley Fertilizers and Chemicals Ltd., Ahmedabad.

Prof Anish Mathuria

- Co-Principal Investigator, 'Study of Privacy, Accountability and Ownership in IoT,' funded by DST, Indo-French Centre for Promotion of Advanced Research

Prof Bhaskar Chaudhury

- Principal Investigator, 'Kinetic Modelling of Large size Negative Ion Sources for Fusion Application using Emerging Parallel Processing Computer Architectures,' funded by Department of Atomic Energy, Board of Research in Nuclear Sciences
- Principal Investigator, 'Establishing NVIDIA GPU Research Center (GRC) DA-IICT, Gandhinagar,' funded by NVIDIA Corporation, USA

Prof Biswajit Mishra

- 'Enabling Technologies for Remote Health Monitoring,' DST, Gujarat (2015-17)

Prof Deepak Ghodgaonkar

- Principal Investigator, 'Ultra Wide Band Dielectric Resonator Antennas,' funded by Space Application Centre, ISRO, Ahmedabad

Prof Hemant A Patil

- Principal Investigator, 'Development of text to speech synthesis system in Indian Languages: High quality text to speech synthesis and small footprint TTS integrated with disability aids,' funded by Department of Electronics and Information Technology (DeitY), Ministry of Communications & Information Technology, Government of India
- Principal Investigator, Development of Prosodically Guided Phonetic Engine for Searching Speech Databases in Indian Languages,' funded by Department of Electronics and Information Technology (DeitY), Ministry of Communications & Information Technology, Government of India.
- Principal Investigator, 'Development of Infant Cry Analyzer using Source and System Features,' funded by Department of Science and Technology, New Delhi, India.
- Principal Investigator, 'Speech-Based Access of Agricultural Commodity Prices and Weather Information in 11 Indian Languages/ Dialects,' funded by Department of Electronics and Information Technology, Ministry of Communications & Information Technology, Government of India.
- Co-Principal Investigator, 'India Digital Heritage (IDH) – A DST Initiative,' funded by Department of Science and Technology, New Delhi, India.

Prof Laxminarayana Pillutla

- 'Fund for Improvement of S&T Infrastructure – PG and PhD Program in CSP,' funded by DST

Prof Manik Lal Das

- Principal Investigator, 'Enabling Technologies for Remote Health Monitoring,' funded by Gujarat Council on Science and Technology, Government of Gujarat.
- Principal Investigator, 'Study of Privacy, Accountability and Ownership in IoT,' funded by Department of Science and Technology, Government of India under Indo-French Collaborative Research Program under DST-INRIA-CNRS Targeted Program

Prof Manish K Gupta

- Investigator, 'Biological System Based Data Storage,' funded by Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar
- Investigator, 'Workshop on Patent and IPR Awareness,' funded by Technology Information Forecasting and Assessment Council (TIFAC), DST, India
- Co-Principal Investigator, 'Technology Incubation and Development of Entrepreneurs (TIDE) center,' funded by Department of Information Technology, Ministry of Communications and Information Technology, Government of India
- Principal Investigator, 'Nodal Institute for promoting start-ups/innovation at DA-IICT,' funded by Industries Commissionerate, Government of Gujarat

Prof Manoj Kumar Raut

- 'Knowledge Compilation in Modal and Multimodal Logic,' NBHM, DAE

Prof Manjunath V Joshi

- 'Immersive Navigation for Walk Through Application,' IDH project Funded by DST, India Duration: Jan. 2011-July2015.

Prof Prasenjit Majumder

- CLIA Funded by DEITY, Government of India

Prof Ranendu Ghosh

- 'Detection of heavy metal pollution in vegetation and characterisation of soil clay minerals using AVIRIS-NG,' AO by SAC, ISRO
- 'Network on Data Science Research,' as consortium partner along with five other institutes to DST, Government of India

Prof Sanjay Srivastava

- Co-Principal Investigator, 'Certification testing for Smart City-Gandhinagar, 2016,' funded by (n)Code Solutions-a division of Gujarat Narmada Valley Fertilizers Chemicals Ltd., Ahmedabad.



Prof Sanjeev Gupta

- 'Ultra Wideband Dielectric Resonator Antenna,' funded by SAC-ISRO, Department of Space, Government of India, 1 Jan. 2015–31 Dec. 2016

Prof Saurabh Tiwari

- Co-Principal Investigator, 'Nodal Institute for promoting Startups/Innovation at DA-IICT, funded by Industries Commissionerate, Government of Gujarat.

VISIT TO INSTITUTES/ INDUSTRIES

Prof Hemant A Patil

- PRSG meeting, to report the progress of DeitY sponsored ASR Phase-II consortium project, 19 Feb. 2016
- Expert faculty, to review curriculum of Semester V-VIII UG, Department of Electronics & Telecommunication Engineering. YCCE Nagpur, 06 Jan. 2016
- Inaugural function, launch for TTS technology developed by the DeitY TTS Phase-II consortium during Digital India Program, where the MOU between TTS Consortium and OS Labs Technologies India Ltd for technology transfer of TTS in 9 Indian languages, New Delhi, 28 Dec. 2015
- Expert Faculty to, review the work of PG students, Gujarat Technological University, Ahmedabad, 22-23 Dec. 2015, 18 Mar. 2016 & 6 Apr. 2016

Prof Laxminarayana Pillutla

- The institute at The Mathworks Academic Summit, Bangalore, 03 Nov. 2015

Prof Manik Lal Das

- National Institute of Technology, Surat, India, Dec. 2014 and June 2015

Prof Manjunath V Joshi

- Coimbatore Institute of Technology 10-12 June 2016
- Zagdu Singh Charitable Trusts, Thakur College of Engineering & Technology, Mumbai, 12-14 Feb. 2016

Prof Rahul Dubey

- Xilinx, San Jose, USA, Feb. 2016
- Mark One prototyping and testing lab, Santa Clara, CA, USA, Dec. 2015

Prof Sanjeev Gupta

- Eleventh Board of Studies Meeting at EC Department of Electronics and Communication Engineering, Charotar University of Science and Technology, Changa, Gujarat, 8 Aug. 2015
- Faculty Board Meeting, Charotar University of Science and Technologies, Changa, Gujarat, 8 Aug. 2015
- External Expert of the Selection Committee for selection of Professors, Department of Electronics and Communication Engineering, Institute of Technology, Nirma University, Ahmedabad, 14 Aug. 2015
- Doctoral Progress Committee Review Member, Subject Expert for evaluation of PhD Student of Gujarat Technological University, Ahmedabad, 19 Sept. 2015
- PhD Thesis External Examiner, Charotar University of Science and Technology, Changa, Gujarat, 26 Sept. 2015
- Seventh Board of Governors Meeting of Government Engineering College (GEC), Gandhinagar, 17 Oct. 2015
- External Expert of the Screening Committee for grant of higher academic grade pay to faculty under Career Advancement Scheme, Department of Electronics and Communication Engineering, Institute of Technology, Nirma University, Ahmedabad, 4 Nov. 2015 and 29 Dec. 2015
- External Expert of SAC Promotion Interview Committee (Scientist-SC to Scientist-SD), Space Applications Centre (SAC), Department of Space, Government of India, Ahmedabad, 24 Nov. 2015 and 14 June 2016
- Convenor of DAC and Gender Cell Meeting, IIIT Vadodara, 10 Feb. 2016

- Subject Expert for Promotion of Faculty (Assistant and Associate Professors) at Institute of Technology, Nirma University, Ahmedabad, 20 Feb. 2016
- Meeting for setting up Sports Complex for academic institutions located along knowledge corridor of Gandhinagar and Ahmedabad, PDPU, 1 Mar. 2016
- Third Advisory Board Meeting, Charotar University of Science and Technology, Changa, Gujarat, 3 Mar. 2016
- External Examiner for ME and PhD Dissertations ME, Gujarat Technological University, Ahmedabad, 15 & 17 Mar. 2016
- Ninth Board of Governors Meeting of Government Engineering College, Gandhinagar, 30 Apr. 2016
- Reviewer of MTech and PhD Dissertations, Charotar University of Science and Technology, Changa, Gujarat, 9 May 2016
- First Board of Governors Meeting of IIIT Vadodara, 23 June 2016
- External Expert of the Selection Committee for selection of Assistant Professors, Department of Electronics and Communication Engineering, Institute of Technology, Nirma University, Ahmedabad, 11 July 2016

Prof Suman K Mitra

- TCS Innovation Center, Kolkata
- University of Dayton, Ohio, USA

CONSULTANCY WORK

Prof Ranendu Ghosh

- Consultant, 'Training on Information and Communication Technology Management' to MEW and UN-FAO Officials, Afghanistan, DA-IICT, Gandhinagar, 23 May to 3 June 2016, consortium partner Sanguine Management Services, Ahmedabad

Prof Naresh Jotwani

- Consultant, KISAN SOLAR-start-up, Ahmedabad

AWARDS/HONOURS

Prof Mukesh Tiwari

- International Travel Support (ITS) by SERB, Apr. 2016

Prof Bhaskar Chaudhury

- Travel award from National Science Fund (NSF, **USA**) / **Intel funds** to present paper at the '30th IEEE International Parallel & Distributed Processing Symposium,' May 2016, Chicago, USA

Prof Biswajit Mishra

- Best Student paper award: Prime Asia, India, 2015
- Best oral paper award (Climate Track): IISF-DST-TIFAC, New Delhi, India, 2015

Prof Deepak Ghodgaonkar

- Fellow, Institution of Engineers, Malaysia
- Life Fellow, Institution of Electronics and Telecommunication Engineers, India.
- Senior Member, Institute of Electrical and Electronics Engineers, (SMIEEE), USA

Prof Hemant A Patil

- NVIDIA Hardware Grant Titan X GPU for Speech Research 8 Mar. 2016
- Session Chair, EUSIPCO 2015, France, 31 Aug.-04 Sept. 2015.
- Session Chair, INTERSPEECH 2015, Germany, 6-10 Sept. 2015
- Eighteenth International Conference on Text, Speech and Dialogue, Plzen, 14-17 Sept. 2015
- International Conference on Acoustics, Speech, and Signal Processing, Shanghai, China, 20-25 Mar. 2016
- Conference on Advances in Signal Processing, Pune, 9-11 June 2016
- IIIT Vadodara to teach a BTech. core course on Signals and Systems during Autumn 2015 and Winter 2016
- DeitY TTS Phase-II Team (Ms. Tanvina B. Patel and Dr. Hemant A Patil) has topped in a



worldwide competition, 'ASV Spooof Challenge 2015 during INTERSPEECH 2015, Dresden, Germany'

Prof Manjunath V Joshi

- A plaque of appreciation on achieving excellence in teaching and research at DA-IICT, Teacher's Day, 5th Sept. 2015
- Mentor, the Mentoring Sessions, 8th International conference on communication system and networks, Bangalore, India, 5-9 Jan. 2016
- NVIDIA Hardware Grant Geforce GTX Titan X GPU for research, Apr. 2016

Prof Manish K Gupta

- Featured Reviewer, ACM Computing Review, Feb. 2016
- Featured in Five Manish Gupta (Interview by Angela Pugh, ACM Computing Reviews Journal), USA, Feb. 2016
- The Google of Maths, Interview by Siobhan Roberts, Nautilus Science Magazine, USA, Oct. 2015

ANY OTHER SIGNIFICANT CONTRIBUTIONS

Prof Asim Banerjee

- Member, RPS committee, three PhD Scholars of Computer Science and Engineering Department of SVNIT, Surat
- Member, RPS committee, one PhD Scholars of Electronics and Communication Engineering Department of SVNIT, Surat
- Examiner for a PhD Scholars, Electronics & Communication Engineering Department of SVNIT, Surat
- Supervisor, one PhD Scholars of Ganpat University, in the area of Bio-medical Engineering
- Convenor, Post Graduate Committee DA-IICT
- Organised CEP Workshop on 'Geometrical Interpretation of Mathematical Concepts,' DA-IICT, Gandhinagar, 11-13 Jan. 2016

Prof Biswajit Mishra

- External Examiner, GPSC, Government of Gujarat
- State Evaluator, NCSC, DST, Government of India
- Faculty Selection Committee IITV, 2014
- Faculty Selection Committee AU, Ahmedabad, 2015
- External Examiner, GTU, Gujarat
- External Examiner, SVNIT, Surat
- External Examiner, PhD. Ahmedabad University

Prof Deepak Ghodgaonkar

- Member, Research Promotion Committee, 23 June 2016

Prof Ganesh Bagler

- Research was adjudged at the Best of 2015, MIT Technology Review, Dec. 2015

Prof Hemant A Patil

- Resource faculty, CEP program for ISRO Scientists, DA-IICT, Mar. 08-12, 2016
- Developed a state-of-the-art Speech Signal Processing Laboratory
- Linked Speech Lab at DA-IICT to ISCA Speech Labs (across the world) website. This is First Speech Lab from India which is being linked to ISCA Speech Labs.
- Principal Investigator and Co-Principal Investigator for five centrally Government funded sponsored
- Proposed, new MTech (ICT) program with specialization in Signal Processing.
- Coordinator, MTech (ICT) with specialization in Signal Processing
- Observer, Surat Center for online entrance examination for MSc (IT) and MSc (ICT in ARD) program at DA-IICT for Admissions 2015-2016

Prof Manish Narwaria

- A US patent application is under review for work on High Dynamic Range video quality measurement. The title of the invention is

'Method for Determining a Visual Quality Index of a High Dynamic Range Video Sequence'

Prof Manish K Gupta

- Patents filed, 'Replication and storage of media data in bacteria and other similar microorganisms,' Mar. 2016, Inventors: Manish K Gupta, Dixita Limbachiya, Taslimarif Saiyed and Ravikumar M. Reference Number: T.1 (06)/TIFA/2016
- Member Doctoral Committee, Pandit Deendayal Petroleum University
- PhD Thesis External Examiner, Bharatidasan University, June 2016
- PhD Thesis External Examiner, Dibrugarh University, June 2016
- Award Reviewer, Gandhian Young Technological Innovation awards, given by SRISTI (Society for Research and Initiatives for Sustainable Technologies and Institutions) at Rashtrapati Bhavan as part of Festival of Innovation hosted by the Office of the President of India, 2016
- External Projects Examiner, Extra Mural Research Division (EMR-11), Council of Scientific & Industrial Research (CSIR), 2016
- Member, Gujarat State Level Implementation Committee for Start-up/Innovation, Industries Commissionerate, Government of Gujarat
- Coordinator, Screening Committee for Gujarat Government Nodal Institute for start-ups at DA-IICT
- Member, Due-Diligence & Project Mentoring of Indo-Spain Industrial R&D Project of Global Innovation & Technology Alliance (GITA), A joint venture of Technology Development Board, Department of Science and Technology and Confederation of Indian Industry
- Coordinator, ICICI Bank Trinity Program, DA-IICT
- Chairman, Executive Council, DA-IICT Center for Entrepreneurship and Incubation
- Member, Executive Council, DA-IICT Center for

Entrepreneurship and Incubation

- Contributed, Scheme for Supporting Creation of World Class Incubators of the Department of Industrial Policy and Promotion of Ministry of Commerce, Government of India
- Contributed, action planning and generating the agenda for the draft of the Financing Innovations Roundtable Meeting of FOIN 2016 (held at Rashtrapati Bhavan in Mar. 2016), IIM Ahmadabad, 16 Feb. 2016
- Contributed, for drafting the vision document for start-ups in Gujarat, June 2016
- Contributed, robust DA-IICT Faculty Entrepreneurship Policy and contributed to the key points, Jan. 2016

Prof Mukesh Tiwari

- Member, Expert Committee, setting up Physics Laboratory, IIIT Vadodara

Prof Prasenjit Majumder

- Serving Project Review Steering Committees, constituted by Ministry of Electronics and Information Technology, Government of India. The tenure is 2015-2018

Prof Rahul Dubey

- Certificate in Embedded Systems, University of California, Santa Cruz, Silicon Valley Extension, June 2016, CA, USA
- Course on 3D Printing, Continuing Education, June 2016, Sunnyvale, CA, USA

Prof Sanjeev Gupta

- External Expert, SAC Promotion Interview Committee (Scientist-SB to Scientist-SC and Scientist –SC to Scientist-SD), Space Applications Centre, Department of Space, Government of India, Ahmedabad
- External Expert Member, selection of faculty at Institute of Technology, Nirma University, Ahmedabad
- External Expert Member, selection of faculty, Gujarat Technological University, Ahmedabad.



- Subject Expert, faculty selection, Charotar University of Science and Technology, Changa, Gujarat
- Member, Doctoral Progress Review Committee, PhD students of Gujarat Technological University, Ahmedabad
- Expert Member, Research Progress Committee, Faculty of Doctoral Studies and Research, Nirma University, Ahmedabad
- PhD Reviewer, Charotar University of Science and Technology, Changa, Gujarat.
- Reviewer, ME Dissertations, Gujarat Technological University, Ahmedabad
- Subject Expert to review the academic performance of ME, Wireless and Mobile Computing, Gujarat Technological University
- PhD Thesis Examiner, evaluation of Doctoral thesis, Mukesh Patel Institute of Technology, SVKM's Narsee Monjee Institute of Management Studies, Mumbai

- PhD Thesis Examiner, Charotar University of Science and Technology, Changa, Gujarat.

Prof Shweta Garg

- Examiner and Selection Panelist Member, SPM, PDPU for MBA admissions

Prof Yash Vasavada

- Y. Vasavada, X. Huang, A. Purohit, C. Ravishankar, J. Corrigan III, 'Method for Iterative Estimation of Global Parameters,' US Patent US9099776 B2; 2015
- J. Xu, Y. Vasavada, M. Parr, C. Ravishankar, A. Noerpel, and J. Jong, 'Method and system for acquiring ephemeris information,' US Patent 8,963,772; 2015

Prof V Sunitha

- PhD Research Progress Committee, SRM University, Chennai



Faculty and Staff Updates

FACULTY

The faculty consisted of regular faculty, visiting faculty on full time basis besides adjunct faculty who taught specialized courses. The list of faculty members is **Annexure 3**.

New Faculty

The following faculty have joined the Institute during 2015-16:

1. Saurabh Tiwari joined as Assistant Professor on 17 August 2015
2. Ashutosh Bhatia joined as Assistant Professor on 27 November 2015
3. Rajib Lochan Das joined as Assistant Professor on 10 December 2015

4. Manish Narwaria joined as Assistant Professor on 16 December 2015
5. P S Kalyan Sashidhar joined as Assistant Professor on 21 December 2015

Faculty Resignation

1. Purushothaman A. Assistant Professor on 04 December 2015

STAFF

New Staff

1. Sunil Kumar Jain, Manager-Placement & CEP wef 17 August 2015





Student Activities and Achievements

Co-curricular activities form an important part of student life at DA-IICT. The campus continued to be a vibrant and lively place, with sports, cultural and other activities throughout the year. Students distinguished themselves in a diversity of international and national level competitions, won several prizes, or made it to the finalist teams, and brought further prominence to DA-IICT among the top engineering institutions in the country.



Synapse-2016

The twelfth edition of Synapse, the Annual Techno-Cultural Festival of DA-IICT, was organized from February 25 to 28, 2016. The events at Synapse were designed to inspire solutions in which technology, culture, humanitarianism, and viability symbiotically coexist. With systematic and generous support from the corporate community and overwhelming participation of students from all over India, it can definitely be said that the festival was successful as the spirit of cooperation, involvement, publicity, sponsorship, innovation, creativity, fusion, rhythm, aesthetics, fun and frolic, drama, fashion – were all at their peak during Synapse-2016. The surfeit of technical and cultural events enthralled audiences across the board – from those interested in the arts, to the geeks who only enjoy life in front of a computer screen. The main attractions were musical performance by Rainbowdreamers, Standup comedy by Biswa Kalyan Rath, Ragnarock (Rock concert) by Parvaaz, EDM night by VH1 supersonic featuring Naved Khan and DJ Ray, and KK live-in concert.

Sports and Concours

Concours, the Annual Inter-College Sports Festival of DA-IICT was held from October 29 to November 1, 2015 at DA-IICT. Shri Harmit Rajul

Desai, Silver medallist (table tennis) Commonwealth Game 2013, was the Chief Guest at the Opening Ceremony. This event saw a participation in ten sport events by about 1000 students (including 200 girls) from colleges from and outside Gujarat. Shri Sandeep Narwal and Shri. Ravinder Pahal of Pro-**Kabaddi** League of India were the Chief Guests at Closing Ceremony.

The Sports activities during the year saw a significant increase, with the highlights being the hosting of tournaments with other institutes, a wider variety of activities and competitions involving many more students than during previous years and events that involved faculty, staff and students.

Cultural

The Cultural Committee continued its tradition of organizing highly successful, and well attended cultural events on the campus. It aims to bring out talent in the student community in all the possible forms whether it is music, dance, theatre, literary skills, sketching or other fine art styles. In order to showcase these talents various competitions like 'Sangeet Sandhya'-'Dance Nite'-'Drama Nite', 'Rangoli'-'**Hasya-Kavi Sammelan**' were calendared through out the year.

National festivals like Independence Day, Gandhi Jayanti, Republic Day and various other festivals were celebrated. The Cultural Committee along with the Sambhav Committee visited Blind Peoples' Association and spent a joyful day with the special people, and thus marked the end of Independence day on a satisfying note. On Gandhi Jayanti, poetry recitation and a debate on the relevance of Gandhian values in contemporary India were followed by a quiz where participants recalled those facts about Gandhiji that they had read in their school history textbooks.

Annual Youth Run was organized January 26, 2016 as part of the Republic Day Celebrations. The event aimed at youngsters to promote the messages of **Women Empowerment** and **Cleanliness** and the concept of **Smart City**. This year the event was organized in association with the Gandhinagar Municipal Corporation and constituted a 7-km run in Gandhinagar. The run was flagged-off by the Mayor of Gandhinagar, Smt. Hansaben Modi.

Around 1700 participants took part in the event. The participants were given T-shirts with the slogan 'Clean Smart City' on it, taking forward the '**Swachh Bharat Abhiyan**'. Two street plays on Women Empowerment and Cleanliness by the students of DA-IICT and NIFT were organized.

Mahila Karmayogi Diwas (Women Education Day) was celebrated on August 7, 2015 as part of Women Empowerment Fortnight. The event was sponsored by the Government of Gujarat. Fifty girl students from Vishwakarma Government Engineering College, Ahmedabad visited DA-IICT for the event. Director DA-IICT gave a talk on the role of DA-IICT in attracting girl students and their achievements. A film on Women empowerment was also screened followed by the discussions and sharing of their experience by the participants.

Rashtriya Ekta Diwas (National Unity Day) was celebrated on October 31, 2015 (Birth Anniversary of Sardar Vallabhai Patel). As part of the celebrations, the Debate Club organized a general discussion on the topic 'Relevance of Unity and Principles.'

The Debate Club organised a group discussion to commemorate the Birth Anniversary of Swami Vivekananda on January 12, 2016, as part of **National Youth Day** celebrations.

On **Martyrs' Day**, January 30, 2016, the students and staff of DA-IICT took a pledge for cleanliness. A two-minute silence was also observed in the memory of the martyrs.

DA-IICT conducted a Yoga Session on Raja Yoga based Meditation and Relaxation as part of the **International Yoga Day Celebrations** on June 21, 2016.

A Roadshow was conducted on August 15, 2015 by the **A-League**, a student network that is trying to promote inter-college collaboration among students across various colleges of Ahmedabad and Gandhinagar - DA-IICT, IIM Ahmedabad, EDI, IIT Gandhinagar, NIFT and NID. The roadshow was to promote a particular event called '**Ideathon**' which was a B-Plan event conducted on September 13, 2015 and had A-League members taking a campus tour with the posters of the event.



A-League also organized a musical event 'An Inter-College Jam Session' on October 10, 2015 to bring the students of the Music Club from the best colleges from Ahmedabad and Gandhinagar together at one place.

Twenty five students of DA-IICT got an opportunity to participate in the **Open Day for Undergraduate Students** organized by IIM Ahmedabad at its campus on August 22, 2015. The Open Day was part of IIMA's initiative to provide participating students an opportunity to experience the students life at the Institute, gain exposure to the Case Methodology used for learning at the Institute, and get an insight about career options available after management education.

DA-IICT students also got an opportunity to attend the **Ahmedabad Policy Workshop** conducted by Shri Baijayant Jay Panda, Member of Parliament in September 2015.

DA-IICT's own **e-Campus Mall** (<http://daiict.campusmall.in/>) started on January 20, 2016 to cater to the basic need among the students and alumni – the need to express love, pride and affection for their beloved institute through institute-branded merchandise. It will ensure a strong bond within the campus community and allow the alumni to savour their relationship beyond the four walls of the campus life.

Student Clubs

Student Clubs at DA-IICT campus are the medium to channel the bubbling creativity and enormous potential of students. All club activities are for the students, by the students and of the students. Some of the clubs that exist currently in DA-IICT are Film Club, Theatre Group, **Prayaas**, **Sambhav**, The Press Club, Forward Forum, Quiz Club, Martial Arts Club, Dance Club, and Debate Club.



Prayaas has been set up with the vision of ‘personal transformation through outreach activities.’ It is involved in community service in the form of caring about people with disabilities and other problems.

Sambhav is a non-profit student's group at DA-IICT which strives for bringing smiles on the faces of underprivileged people. Apart from regular teaching projects at Blind School, Orphanage for HIV positive kids, Government Primary Schools, it organised mass events on Independence Day, Republic Day, and Gandhi Jayanti. One such event worth mentioning is the Independence Day Celebration with the children from Deaf and Dumb School, Blind School and Orphanage. These children were served the food and chocolates and were taken from the Orphanage to visit Science City in Ahmedabad. They were brought to DA-IICT campus for evening supper and were finally dropped at their Orphanage.

Sambhav also organized two **Blood Donation Camps** (with the Civil Hospital) on September 17, 2015 and April 6, 2016. A series of weekly lectures on Self-Development Program by distinguished speakers from Shri Ram Chandra Mission (SRCM) - U-Connect Initiative, was organised from September 19, 2015. Relaxation and Meditation sessions were also organized.

The **Spic-Macay Heritage Club** invited the world renowned Kathak Dancer and recipient of Padma Shri, Smt. Sunayana Hazarilal for an evening lecture -cum-demonstration on September 14, 2015. She is one of the top five Kathak exponents of the country and is widely considered as the only surviving practitioner of the *Benaras Gharana (Janakiprasad)* of Kathak.

While **Film Club** provides regular entertainment to DA-IICTians in the form of screening of popular cinema, the **Theatre Group** has been motivated by the Budhan Theatre Group of Ahmedabad and

is focused on producing prosceniums and street plays. The Group performed its own on October 6, 2015. The Group also provided a comic relief by its performance ‘*Baap re baap*,’ a satire on the web of relationships in a middle class Indian family. Drama Nite (in the categories of stage play, musical play (Felicity) and mimes, were organized during April 7-8, 2016.

The **Press Club** brings out an e-magazine called Entelechy, with sections ranging from global news, to DA-IICT news, to movie, book and music reviews, to poetry, technical articles and debates. The magazine covers articles by the students and the alumni on various sections – Campus Clamour, Self Science Scion, Sports, Techyon, Books, Films, Music, Food, Freeze Frame, GNA, Vuelo, Random Noise, Point Counterpoint, Warps and Wefts, Summer Chilliers, etc. The first edition of the magazine came out in the year 2005 and July 2016 is the latest one. The Press Club under the guidance of a faculty mentor is constituted every year by the Student Body Government. One of the students is elected as the Editor of the Magazine and other student members serve as Section Heads of various sections of the magazine.

The **Debate Club** has grown remarkably since its inception in 2009. Besides conducting weekly debates and Intra-college debate competitions, the club has also organised a Youth Parliament and an Inter-college Parliamentary Debate. Twelve students participated in GNLU Parliamentary Debate 2015 held from September 18-20, 2015. It also conducted an Open Forum Discussion on the topic ‘Net Neutrality - For or Against’ on February 18, 2016.

To enrich the students with various hobbies such as theatre, dance, instrumental and vocal music, art, etc workshops were conducted which served as a platform nurturing budding talent. ‘**Friday Night Live**’, an initiative of the **Music club** in DA-IICT was introduced to encourage the students and provide them with a platform to showcase their talent. The musical talent of the students was at its best during the much awaited musical event ‘*Raaga*,’ which was organized by the Music Club organized on November 20-21, 2015. Indian Solo, Indian Duet, Indian Group, Rhyme, Standup Comedy, Western

Solo, Western Duet, Western Group, Instrumental and Rap were organized as part of the event.

Dance Club -- the Dance Coders, tried its best to combine the deep-seated passion for the art with dedication and teamwork. A Dance Nite was conducted on January 20, 2016. The event was held in various categories -- Indian Solo, Western Solo, Duet and Group.

Quiz Club (Headrush) organized regular quiz events on campus, and encourages students to participate in various quiz competitions around the country. A general quiz for the faculty was organized on September 22, 2015. The quiz contained questions from all fields of interest, from Science, Technology, Business to World and Indian History as well as questions on Pop Culture, Movies, Music, Literature, Sports and Etymology.

Cubing Club conducted various sessions on different methods of solving the 3x3 Rubik's cube and the notations of the cube. The session introduced them to various types of puzzles including the Pyraminx, Mirror cube and the regular 3x3, 4x4, 5x5, etc.

Excursion Club organized an exciting and adventurous trip to Alibaug, Maharashtra and Water Kingdom (Essel World), Mumbai, Maharashtra during September 24 - 27, 2015.

Fashion Week was organized from November 16 to 20, 2015. There was a theme (corporate, traditional, movie, colour code) decided for each day and everyone dressed up accordingly. Students from all the batches were given an opportunity to bring forth their creative and aesthetic skills when they designed their costumes on the basis of a particular theme.

Cultural weekend (involving various events like painting, sketching, housie) was organised during April 9-10, 2016

The **Hostel Management Committee (HMC)** organized the Hostel Cleanliness Drive and Cleanest Room & Wing Competitions, in both the Halls of Residence (HOR) – Men and Women in March 2015. Mr. Hari Om Gandhi, Zonal Director of Narcotics Control Bureau interacted with the students and gave a talk on 'Drug Abuse and Living a Healthy

Life' on March 4, 2016. A talk and interaction by Oowomaniya, an online organization working on women's health was organised on January 18, 2016. The invited speaker was Dr Shital Punjabi, a leading gynecologist from Ahmedabad.

In line with the **Swachha Bharat Abhiyan**, the HOR Women have organized a poster making competition for first year women students to raise awareness on the cleanliness of the hostel and common areas on August 25, 2015. It was followed by an hour long interaction of all the residents of HOR Women, where they were shown a skit by fellow residents on maintaining hygiene.

Apart from these non-academic and social activity clubs, few groups sound serious academic. **Electronics Hobby Club (EHC)**, **Linux Users Group (DLUG)** and **IEEE (Institute of Electrical and Electronics Engineers)** Student Branch belong to this category. EHC is a place for playing with electronic circuits and instruments out-of-the-classroom. DLUG is committed to actively promote the use of Linux and other open source software for strengthening the objective of the worldwide open source movement.

Various other student clubs were active during the year and organized their events for student groups ranging from a few dozens, to a few hundreds. Notable among these Clubs were **The Aryans**, **Web Dev Club** and **The Programming Club**.

'Ideoson', an initiative taken by the **Microsoft Club Technical Club (MSTC)** is all about developing an idea into a live app and giving it a new face and scope. Cool apps that surprise and delight mobile users, built by developers in the student community, are a vital part of the Ideoson vision. MSTC approached the students to present their ideas and then work with the skilled members over the summer to build an app and finally take them to the competitions like Microsoft Imagine Cup, Microsoft BizSpark India StartUp Challenge, mBillionth App Competition etc. The final presentation of the well-planned ideas was carried out on April 12, 2015.

Google Developers Group conducted GDG Devfest in October 2015.



Microsoft Technical Club invited Microsoft team at DA-IICT on March 12, 2016. One of the interesting thing which they demonstrated was 'how to connect Raspberry Pi board to the cloud,' a very important topic for the students interested in IoT (Internet of Things). The team also talked about the Microsoft Imagine.

Forward Forum organised lectures and other activities by eminent national and international personalities on campus.

ICICI Trinity was launched on April 25, 2016.

IEEE Student Branch Activities

IEEE Student Branch provides opportunities to the students to gain relevant knowledge and learn technical skills through experts of ICT and related areas.

Summer School'16: The Summer School 2016 was conducted at DA-IICT from June 8 to 24, 2016. The track of Summer School'16 covered all aspects of Android Development with an introduction to wearable technology as well. The sessions started from the basics of Android development, moving towards best practices and efficient design principles. Over the course of these 7 days, the students were able to build complete applications covering front end and back end development as well. To motivate beginners, their apps were published on the Google Play Store account under the Mobile Apps Special Interest Group of the IEEE Student Branch of DA-IICT. Shri. Rajat Talesra (Facilitator, Google), Shri Hitesh Kachella (Tops Technology) and Shri. Neel Mevada (KoolMind Technologies) were the invited speakers.

i. Fest'15 – Embedding Ingenuity: It aimed at providing a platform for budding engineers to showcase their talent and inculcate the valuable skill of innovation. The emerging technologies like the Internet of things (IoT) and embedded design motivated students to promote the festival with its theme being Embedding Ingenuity. It was organized by the IEEE student Branch of DA-IICT from October 23 to 25, 2015. Inaugural talk on **Smart Cities** was delivered by Mr. Pankaj Gupta, Senior Vice President, IL&FS (GIFT City, Gandhinagar). There were 19 events, ranging

from robotics to software development (like i.Quiz, i.Bot, i.Intelligence, i.Biz, and i.Crypt), as part of this festival. Along with that, an array of attractive fun events was also organized to entice the crowd and gather greater participation which led to greater involvement in the festival. The hangout was joined by several IEEE members from across the country.

WiE Appathon'15: The Women In Engineering (WIE) affinity group of IEEE Student Branch of DA-IICT organized 'Appathon' on August 17, 2015 wherein the students made an innovative mobile application which could help women in any of the suggested themes (social, empowerment, utilities, education, health, lifestyle and games). Female students were encouraged to participate.

The first edition of **TEDxDIICT** was held on February 21, 2016. Dr. Manisha Shah, popularly known as the 'mother of football,' initiated *Kahaani*, a sports academy in Ahmedabad to nurture the idea of better health and an understanding of the importance of sports in our daily lives. She gave an inspirational talk about her journey with *Kahaani* and how it has impacted the lives of thousands of kids. Other invited speakers include Ms. Jazz Sethi, a professional choreographer and founder of HEAL, a non-profit initiative which works with children suffering from cancer or any other disease, Ms. Kristin Kagetsu, Co-founder and Chief Executive Officer of *Saathi*, a social enterprise dedicated to providing eco-friendly sanitary pads to women everywhere, and currently an MIT DLab ScaleUps Fellow and one of the Asia21 Young Leaders, and Shri. Nitin Tailor, founder of the Serve Happiness Foundation, which organizes youth inspirational programs and journeys to not only unravel the ethereal beauty of our country but importantly imbibe and spread the cultural values and the ensuing happiness onto our persona and the world at large.

STUDENT ACHIEVEMENTS

A Team comprising of BTech 2013 batch students - Yashwant Keswani and Akshar Varma have secured second place in Student Parallel Programming Challenge (supported by Intel and NVIDIA) at 23rd

International Conference on HPC, Data and Analytics (HiPC 2016).

Zarana Parekh, BTech 2013 batch student has been shortlisted from India to participate in the Viterbi-India Program (supported by The Viterbi School of Engineering, University of Southern California and the Indo-US Science and Technology Forum). This program provided her the opportunity to undertake a research internship at the Viterbi School of Engineering in summer 2016 for a period of 8 weeks.

Ms. Tanvina B. Patel, MTech student and DeitY TTS Phase-II sponsored project staff member, has got travel grant of USD 1000 from IEEE Signal Processing Society Travel Grant, USA to present her research paper at 2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2016) -- a flagship event of IEEE Signal Processing Society (SPS), USA.

Sumeet Varma and Tejasv Gupta, BTech 2013 batch students secured 3rd and 7th position in India for the pre-final round of Google Code Jam-2016 respectively. Tejasv Gupta also secured 398 rank worldwide for the pre-final round of Google Distributed Code Jam-2016.

Nidhi Vyas, BTech student from Information Retrieval Lab, DA-IICT got an offer from The Center for Language and Speech Processing, Johns Hopkins University for her BTech project.

Sarita Agrawal, PhD Scholar, has earned the 'Best Paper Award (PhD Forum Track)' from the IEEE Advanced Networks and Telecommunications Systems (ANTS) 2016.

Zarana Parekh, BTech 2013 batch student has been selected as a recipient of the Google Anita Borg Memorial Scholarship Asia Pacific 2016.

Sumeet Verma, Kuldeep Patel, and Yash Kumar, BTech students stood second in Hackerearth Collegiate Cup held at Bangalore.

Sumeet Verma, and Yash Kumar, BTech students, stood 3rd and 9th respectively in the Sears Dots and Arrows-Hackerrank.

Mahendra Kumar Yadav, MSc (ICT-ARD) student developed mobile app for marketing agricultural products as part of his internship project.

Vandana Ravindran, Phd Scholar, was invited by The Faculty of Life Sciences, The University of Manchester, UK as Visiting Researcher under the University's Program for visiting academics. She was at the University in March 2016 conducting research under the supervision of Prof David Robertson and Dr Jean-Marc Schwartz, faculty members of the Faculty of Life Sciences.

BTech 2012 batch students, Nikhil Jain and Ajay Gaur won the IdeaThon 2015 (a B-Plan competition in which 60+ students had participated) held at CIIE IIM Ahmedabad.

BTech 2015 batch students, Aashay Binaykia and Labdhi Shah won the British Parliamentary Debating competition in the Novice category at GNLU Debate 2016.

DA-IICT's Music club bagged second runner-up in the Indian rock event held at BITS, Goa. Twelve students of DA-IICT participated in Waves'15 (annual cultural festival of BITS Goa) in Dance competition (Group, duet & solo) from November 4 – 8, 2015.

Twelve students of DA-IICT participated and won prizes in various sports events at IIM Ahmedabad Sports Festival held from October 9 -11, 2015. DA-IICT project selected for Design in India challenge.

DA-IICT was adjudged 3rd best college in India and 11th best in the world in a recent competition held on Hackerrank to determine the best universities in terms of coders.





Alumni Activities and Achievements

The 4200 alumni consisting of Engineers, Design, Agriculture and Rural Development Professionals and Academic are spread all over the world. The Association organized a number of events and interacted with the current students and offered assistance and guidance in identifying internships, research, training and placement opportunities. A good number of them visited the campus, met with faculty and students and shared their work place experiences and emerging technologies.

The Chapters of Alumni Association in India and abroad have organized several meetings and get-togethers in the chapter locations. The DA-IICT Alumni Website (<https://daiict.almaconnect.com/>), Alma Connect, a company incubated by the DA-IICT Incubation Centre and co-founded by DA-IICT alumni, manages the Alumni Web Portal.



Resource Centre

In a volatile era of Internet, the Resource Centre (RC) continues to play a critical role for the DA-IICT community.

It is living by its mission to enhance the access to the ever expanding universe of knowledge thereby fully aligning to the overall vision of building knowledge-led society.

The rapid growth of information, both in print and digital media, brings forth a challenge of connecting each user to its relevant information in the quickest possible manner. The RC has been accelerating on the path of continuous improvement and development to achieve this audacious goal.

The year 2015-16, came with many such challenges and RC went ahead with full force to take all into its stride and deliver the services in a professional manner.

Looking Back:

The richness of the RC collection is evident from the variety of subjects which it covers the core and the cross-disciplines such as Anthropology, Social Change, Economics, Language, Communication, Design, Philosophy, religion -- to name a few.



Equally worth a mention are the different forms of the collection the video, audio, print and digital also available to the user community.

Our faculty members and ever-inquisitive student community have helped us evolve this collection.

The RC plays a custodial role for internally generated intellectual output, which is well-received and well-respected by the external scholarly world. These include published works such as books, chapters, monographs, journal articles, dissertations, audio-visual material, lectures, posters etc.

RC collection as on 31st July 2016

Collection Type	2015-16 Additions	Total as of 31 July 2016
Books	539	30726
Print Journals	91	127
AV Collection	75	3808
Theses & Dissertations	69	549

The users made a good use of the collection and over 13735 items were issued out to the students and faculty of the institute.





Digital Resources:

The advent of e-resources has helped the RC to make them available to its users in an efficient manner. It also offers a transparent way to track its usage and thereby modulate our reach out activities.

RC subscribed to the following 11 digital resources during the reporting year. The RC Committee has declared it as a core collection to support Institute's academic and research activities.

- ACM Digital Library
- ASA Digital Library
- American Institute of Physics (AIP) Online Journals
- ASABE Technical Library
- IEL Online Library (IEEEExplore)
- indiastat.com
- JSTOR Archive
- LNCS Online Collection
- ITU Recommendations
- Publications from USENIX
- ScienceDirect (Computer Science Collection)
- Springer Online Journals
- Springer eBooks (Computer Science)
- Wiley/MIT eBooks Collection

These online resources contain more than 4800 peer-reviewed/specialised e-journals and statistical databases.

Facilities Improvements:

An enriched vocabulary helps in delivering powerful and effective communication – a must virtue for higher education. RC facilitated setting up of a language lab within one of its wings to benefit the student community.

The RC has added 30 computer terminals to encourage the use of e-resources including journals, databases and AV collection.

RC website has been updated to include number of services such as the customised bibliographies for the various courses and subjects. The special lectures delivered by various dignitaries and scholars are now available on the RC website.

External world connect:

The RC receives number of requests to share its resources. Similarly, RC services its own requirements by reaching out to other large libraries and associations. This practice of mutual resource sharing not only saves time but also generates goodwill and a sense of reciprocity.

RC borrowed 29 and shared 16 books to other institutions. It also received 324 research papers which were requested by the faculty and delivered 56 papers to other institutions.

RC is a member of Ahmedabad Library Network (ADINET), Ahmedabad Management Association (AMA), American Society of Agricultural and Biological Engineers (ASABE), British Library, Ahmedabad, Computer Society of India (CSI), International Telecommunication Union (ITU), and UGC-Infonet Digital Library Consortium, among others.

RC continues professional networking with ADINET, DELNET, INFLIBNET and IIT-Gandhinagar.

Students Orientation Program:

This session, specially designed for the fresh student batches, focuses on the key services, collection and facilities. The RC conducted such sessions between 22-25 July and 26-28 July 2016.

Visitors:

RC continued to receive students, and distinguished guests as its visitors.

RC had the following key visitors during Aug 2015 to July 2016.

Institution	Visit Date
Shiv Ashish School, Ahmedabad–(XI science stream 42 students & 3 faculty members)	22 April 2016
VPLP Kadi -Diploma Students	03 September 2015
Prof. Biswarup Sen - University of Oregon, Eugene, Oregon, USA	16 December 2015

Internships:

RC has been a good training ground for the fresh library and information science graduates. During the reporting year, 4 trainees were selected on a monthly stipend-basis and they will be trained to work in all aspects of librarianship including handling various routine transactions, managing the digital media, metadata assignment and overall upkeep of the library.

Professional enrichment activities:

- Shashikumara AA & Vipul Banker participated in a two-day 'National Digital Library Workshop on 'Institutional Digital Repository & Metadata Engineering' held at the Maharaja Sayajirao University of Baroda, Vadodara during January 28-29, 2016.
- Suryanath Singh, Nitesh Singh Pawar and Vipul Banker participated in 'IASLIC 2015: The IASLIC 30th All India Conference 2015' with the theme Library Legislation and Community Information Services held at the Department of Library and Information Science, Gujarat University, Ahmedabad, during December 28-31, 2015.
- Shashikumara AA participated in 'FIRE 2015: 7th meeting of Forum for Information Retrieval Evaluation' held at DA-IICT Gandhinagar during December 4-6, 2015.
- Shashikumara AA participated in 'T&F India Books Roadshow 2015' held at Ahmedabad on June 26, 2015.





Infrastructure

The Information and Communication Technology (ICT) Committee works towards the mission to provide the best computing facilities possible for faculty research and student learning. During the reporting year, the Institute has invested Rs. 210.14 lakh in upgrading existing hardware and acquiring new hardware and software.

A High Performance Computing (HPC) Cluster was acquired to meet the computing requirements of the BTech (ICT) Computational Science Program. To meet the high end computing requirements of Research Scholars (including PhD Scholars and MTech students), four computing Servers with the configuration of A Dual Processor (Intel Haswell E5-2620V3) six core machine with 2 X 1 TB Enterprise hard disks with RAID 1 capability and 32 GB memory were acquired. All the four servers are fully operational. To facilitate efficient use of these servers, provisions were made for off-campus access for faculty *via* VPN.

The Institute acquired the Network Attached Storage (NAS) of EMC make to provide storage space for Post Graduate students and Doctoral Scholars (with 5 GB capacity) and faculty members (with 10 GB capacity). The total storage capacity of NAS is around 2.5 TB and through NAS, access to five computing servers is provided. It is planning to create similar facilities for the Under Graduate students in future. The NI USRP boards which are useful for creating SDR based applications as part of the MTech courses on communications and signal processing were procured.

The Institute has subscribed to a three year campus-wide license (CWL) of the popular scientific software

MATLAB and as part of the license; the Institute is entitled for usage of 30 toolboxes of the software. The LABVIEW software license was also upgraded. This is important since most of the virtual instruments have gone through major changes. The Cadence Electronic Design Automation Suite License was renewed and upgraded. To facilitate the design activities of MDes (Communication Design) students, 20 licenses of ADOBE CCT were subscribed. The Turnitin, anti-plagiarism software and campus software agreement licenses were renewed.

The institute has up-graded the core and backup L3 switches and installation of wireless access points. The other up-gradations done were: (a) desktops at VLSI Laboratory, (b) desktops in the reading room of Resource Centre (c) desktops for faculty and staff, and e-mail and blade servers.

On renovation of Lecture Theater 1, new audio-visual equipment including a Full-HD projector, high-end audio system with speakers and amplifier and an interactive lectern with touchscreen, document projects, etc., were installed. The audio-visual equipment in class rooms were also upgraded.

Another major infrastructure development activity undertaken was renovation of the Lecture Theater 1 and changing it from air-cooled to air-conditioned Theatre. A class room in CEP building was converted into a mini-auditorium, four rooms in CEP building was refurbished to set up Research Laboratories. Another room in CEP building was refurbished for expansion of activities of Centre for Entrepreneurship Development. As part of the hostel renovation, washrooms in the hostels were renovated and over 100 rooms were whitewashed and painted.



Annexure 1

MANAGEMENT**Academic Council**

Prof. R. Nagaraj, Chairman	Director, DA-IICT, Gandhinagar
Shri K. Narayan, Member	Management Consultant, Reliance Group, Mumbai
Prof. Surendra Prasad, Member	Professor, IIT Delhi, New Delhi
Prof. David Koilpillai, Member	Professor, IIT Madras, Chennai
Shri Tapan Misra, Member	Director, Space Application Centre, Indian Space Research Organisation, Ahmedabad
Shri Suresh Rangachar, Member	President, Reliance Communications Limited, Mumbai
Prof. Anish Mathuria, Member	Dean (Research & Development), DA-IICT, Gandhinagar
Prof. Suman Mitra, Member	Dean (Academic Programs), DA-IICT, Gandhinagar
Prof. Naresh Jotwani, Member	Professor, DA-IICT, Gandhinagar
Prof. Sanjay Srivastava, Member	Professor, DA-IICT, Gandhinagar
Prof. Binita Desai, Member	Professor, DA-IICT, Gandhinagar
Shri Soman Nair, Secretary	Executive Registrar, DA-IICT, Gandhinagar

Finance Committee

Prof. R. Nagaraj, Chairman	Director, DA-IICT, Gandhinagar
Shri Suresh Rangachar, Member	Trustee, Dhirubhai Ambani Institute of Information and Communication Technology Society, Mumbai
Shri Shrenik Vaishnav, Member	Vice President & Head (Consolidation), Reliance Communications Limited, Mumbai
Prof Suman K. Mitra, Member	Dean (Academic Programs), DA-IICT, Gandhinagar
Shri Soman Nair, Secretary	Executive Registrar, DA-IICT, Gandhinagar

Board of Studies

Prof. Suman K Mitra, Chairman	Dean (Academic Programs), DA-IICT, Gandhinagar
Prof. Anish Mathuria, Member	Dean (Research & Development), DA-IICT, Gandhinagar
Prof. Asim Banerjee, Member	Convenor, Post-Graduate Programs, DA-IICT, Gandhinagar
Prof. Anil K Roy, Member	DA-IICT, Gandhinagar
Prof. Hemant Patil, Member	DA-IICT, Gandhinagar



Prof. P M Jat, Member	Coordinator, MSc (IT) Program, DA-IICT, Gandhinagar
Prof. Madhumita Mazumdar, Member	Coordinator, MDes(CD) Program, DA-IICT, Gandhinagar
Prof. Ranendu Ghosh, Member	DA-IICT, Gandhinagar
Prof. Biswajit Mishra, Member	DA-IICT, Gandhinagar
Prof. Shweta Garg, Member	DA-IICT, Gandhinagar
Prof. Pratik Shah, Member	Indian Institute of Information and Communication Technology Vadodara, Gandhinagar (Alumnus of DA-IICT)
Shri Hasit Kaji, Member	Tata Consultancy Services (Industry Representative)
Dr. Sumitesh Sarkar, Member	Space Application Centre, Indian Space Research Organisation (Nominated by the Academic Council)
Dr. Sanjay Chaudhary, Member	Professor & Head (Research), Institute of Engineering and Technology (IET), Ahmedabad University, Ahmedabad (Nominated by the Academic Council)
Prof. Manik Lal Das, Convenor	Convenor, Under-Graduate Programs, DA-IICT, Gandhinagar

Internal Quality Assurance Cell

Prof. R. Nagaraj	Director DAIICT - Chairman IQAC
Prof. Suman Mitra	Dean-AP, DAIICT - Director IQAC
Shri Suresh Rangachar	Reliance ADA – Management Member
Prof. Anish Mathuria	Dean R&D, DAIICT – Faculty Member
Prof. Sanjeev Gupta	Dean Students, DAIICT – Faculty Member
Prof. Rahul Muthu	Alumni Board, DAIICT – Faculty Member
Prof. Ranendu Ghosh	Convenor, Placement Committee, DAIICT – Faculty Member
Shri Soman Nair	Executive Registrar, DAIICT – Administrative Member
Shri Hasendrasinh Jhala	Head, HR, DAIICT – Administrative Member
Shri Anamitra Das	TCS, Gandhinagar – Member from Employer
Shri Aman Agarwal	Student, DAIICT – Student Member
Shri Valay Vaidya	Student, DAIICT – Student Member
Shri Swapnil Khandelwal	Alumnus, DAIICT – Alumni Member
Shri Roghuvir Songhela	Alumnus, DAIICT – Alumni Member

INSTITUTE OFFICIALS

Director

Prof R. Nagaraj

Deans

■ Academic Programs

Prof. Suman K Mitra

■ Research and Development

Prof Anish Mathuria

■ Students

Prof Sanjeev Gupta

Executive Registrar

Shri Soman Nair

Head-HR and Administration

Shri Hasendrasinh Jhala

Librarian (In-charge)

Prasanna Kumar Muduli

Internal Committees

■ Undergraduate Committee

Prof. Manik Lal Das, Convenor

Prof. Anil K Roy, Member

Prof. Minal Bhise, Member

Prof. Biswajit Mishra, Member

Prof. Bharani Kollipara, Member

Prof. Ganesh Bagler, Member

BTP Coordinator, Member (ex-officio)

■ Postgraduate Committee

Prof. Asim Banerjee, Convener

Prof. Aditya Tatu, Member and PhD Program Coordinator

Prof. V Sunitha, Member and MTech Program Coordinator

Prof. P M Jat, Member and MSc (IT) Program Coordinator

Prof. Ranendu Ghosh, Member and MSc (ICT-ARD)

Program Coordinator

Prof. Madhumita Mazumdar, Member and MDes (CD)

Program Coordinator

■ ICT Committee

Prof. Laxminarayana Pillutla, Convenor

Prof. Rahul Dubey, Member

Prof. Bhaskar Chaudhury, Member

Prof. Manoj Raut, Member

Mr. Rajendra Shah, Member

Mr. Nimesh Patel, Member

■ Placement Committee

Prof. Ranendu Ghosh, Convener

Prof. Jaideep Mulherkar, Member

Prof. Nabin K Sahu, Member

Prof. Gagan Garg, Member

Placement Officer, Member (ex-officio)

■ Resource Centre Committee

Prof. M V Joshi, Convenor

Prof. Prasenjit Majumder, Member

Prof. Manish Gupta, Member

Prof. Rutu Parekh, Member

Shri Soman Nair, Member

■ Web Committee

Prof. Manish Gupta, Convenor

Prof. Sourish Dasgupta, Member



Prof. Puneet Bhateja, Member
Prof. Bharani Kollipara, Member

■ CEP Committee

Prof. Amit Bhatt, Convenor
Prof. Binita Desai, Member
Prof. Shweta Garg, Member
Placement Officer, Member (ex-officio)

■ Annual Report Committee

Shri Soman Nair, Executive Registrar, Convenor
Dean (Academic Programs), Member (ex-officio)
Dean (R & D), Member (ex-officio)
Dean (Students), Member (ex-officio)
Convenor, Placement Committee,
Member (ex-officio)
Prof. Alka Parikh, Member
Prof. Shweta Garg, Member

■ Disciplinary Action Committee

Dean (Students), Convenor (ex-officio)
Warden, HOR-Men, Member (ex-officio)
Warden, HOR-Women, Member (ex-officio)
Dy. Registrar, Member (ex-officio)
Dr. Nandini Banerjee, Member
(Counselor, ex-officio)
Student Representatives – two nominated students

■ Gender Cell

Prof. Binita Desai, Convenor
Dean (Academic Programs), Member (ex-officio)
Prof. Usha Neelakantan (LDCE) – External Member
Dr. Nandini Banerjee, Member
(Counselor, ex-officio)
Ms. Geeta Mehta, Member
Student Representatives – two nominated students

■ Student Activities Council

Prof. Nabin Sahu, Convenor (Sports Committee)
Prof. Mukesh Tewari, Convenor
(Cultural Committee)
Prof. Jaideep Mulherkar, Convenor
(Synapse Committee)

■ Alumni Board

Prof. Sanjay Srivastava, Convenor
Prof. Anil Roy, Member
Prof. Rahul Muthu, Member
Prof. Gautam Dutta, Member
Student Representatives – four nominated students

■ International Student Cell

Prof. Srikrishnan Divakaran, Convenor
Dean (Academic Programs), Member (ex-officio)
Executive Registrar, Member (ex-officio)
Convenor (UGC), Member (ex-officio)

■ Information System Committee

Dean (Academic Programs), Convenor (ex-officio)
Convenor (UGC), Member (ex-officio)
Convenor (PGC), Member (ex-officio)
Executive Registrar, Member (ex-officio)
Deputy Registrar, Member (ex-officio)
Assistant Registrar, Member Secretary
Mr. Suryakant Goswami, Invited Member

■ BTP Coordinator (2014-15)

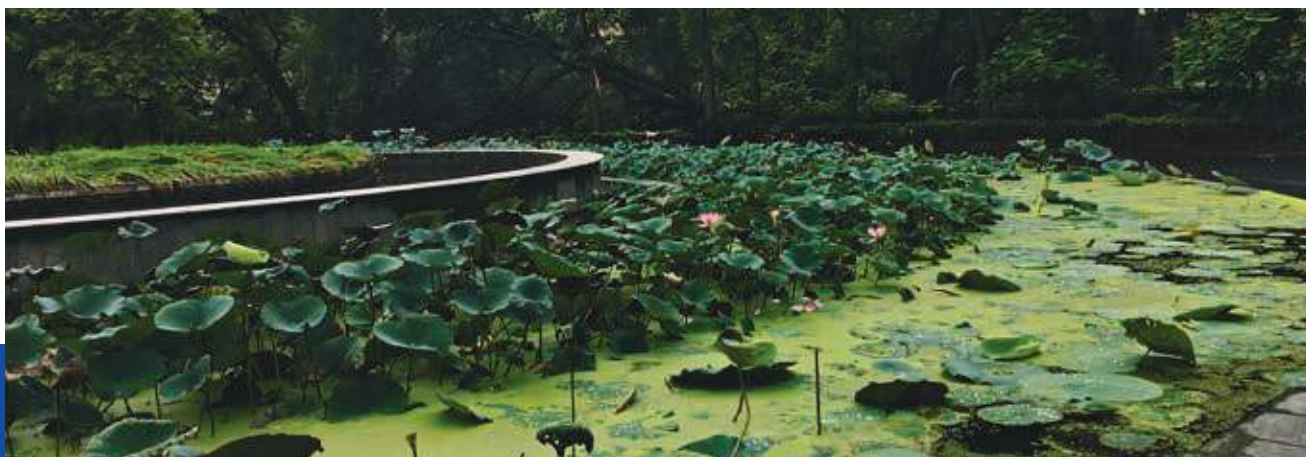
Prof. Prasenjit Majumder

■ Rural Internship Committee (2014-15)

Prof. Anil Roy, Convenor
Prof. Alka Parikh, Member
Prof. Jaideep Mulherkar, Member

■ Summer Internship Coordinator (2014-15)

Prof. Sourish Dasgupta



Annexure 2

THESES, PROJECTS AND REPORTS**PhD Theses**

1. Dhoot, Vivek, Design and Analysis of Multiband Fractal Antenna; xiv, 124 p.; 2015. (Supervisor: Sanjeev Gupta)
2. Dharmani Bhaveshkumar Choithram, On Large Scale near-Independent Blind Source Separation; xv, 205 p.; 2015. (Supervisor: Suman Kumar Mitra)
3. Patel, Sanket S., Design and analysis of novel receiver front-end sub-systems in ku-band for satellite applications; xiv, 93 p.; 2015. (Supervisors: Sanjeev Gupta and Deepak Ghodgaonkar)
4. Kishorkumar Parsottambhai Upla, Some New Methods for Multi-resolution Image Fusion; xxi, 173 p.; 2016. (Supervisor: Manjunath V. Joshi)
5. Ashish Phophalia, Techniques for Denoising Brain Magnetic Resonance Images; xviii, 120 p.; 2016. (Supervisor: Suman K. Mitra)
6. Chaturvedi, Manish, Multi-modal design of an Intelligent Transportation System; ix, 143 p.; 2016. (Supervisor: Sanjay Srivastava)
7. Narmawala, Zunnun A., Peer-to-peer Communication in Mobile Social Network; xvi, 108 p.; 2016. (Supervisor: Sanjay Srivastava)
5. Davda, Abhishek A., Ultra low power management unit; ix, 55 p.; 2016. (Supervisor: Dr. Biswajit Mishra)
6. Dave, Ainish Juotindra, Private targeted advertising using homomorphic encryption; vii, 34 p.; 2016. (Supervisor: Maniklal Das and Prasenjit Majumder)
7. Dave, Ishaan, Design and implementation of high power amplifier using gallium nitride; ix, 40 p.; 2016. (Supervisor: Deepak Ghodgaonkar)
8. Gupta, Jitendra, Counting spanning binary trees of labelled undirected graphs; vi, 25 p.; 2016. (Supervisor: V. Sunitha)
9. Gupta, Ketan, Design of wideband low noise distributed amplifier; x, 47 p.; 2016. (Supervisor: Deepak Ghodgaonkar)
10. Gupta, Shruti, Power reduction schemes in an interrupt driven processor based SoC; x, 38 p.; 2016. (Supervisor: Dr. Amit Bhatt)
11. Jain, Shweta, Interrupt based system-on-chip for IOT application with deterministic response and low power usage; vii, 33 p.; 2016. (Supervisor: Amit Bhatt)

MTech Theses

1. Baghel, Sonal, Physical layer network coding in relay assisted OFDM based wireless networks; viii, 44 p.; 2016. (Supervisor: Laxminarayana S. Pillutla)
2. Bathiya, Bhavika, Air pollution monitoring using wireless sensor networks; x, 58 p.; 2016. (Supervisor: Sanjay Srivastava and Biswajit Mishra)
3. Bhavsar, Himanshu N., Novel nonlinear prediction-based features for spoofed speech detection; ix, 52 p.; 2016. (Supervisor: Dr. Hemant A. Patil)
4. Chander, Ankush, Study on cross lingual information retrieval in Indian languages; viii, 25 p.; 2016. (Supervisor: Prasenjit Majumder)
12. Kale, Vishwamber N., Design of 64-bit SRAM using single electron transistor; viii, 39 p.; 2016. (Supervisor: Rutu Parekh)
13. Kathpal, Hanish Kumar, Object classification of remotely sensed images using deep learning; vii, 37 p.; 2016. (Supervisor: Manjunath V. Joshi)
14. Khalpada, Purvish, Simple automated story generator; ix, 43 p.; 2016. (Supervisor: Asim Banerjee)
15. Khatri, Jyotsana, Verbose query processing in biomedical information retrieval; vii, 32 p.; 2016. (Supervisor: Prasenjit Majumder)
16. Kokane, Tushar V., Knowledge compilation in multimodal logic; vi, 36 p.; 2016. (Supervisor: Manoj Kumar Raut)
17. Kumar, Chandra Shekhar, Design of RF front-end receiver sub-system; x, 44 p.; 2016. (Supervisor: Sanjeev Gupta)



18. Londhey, Arjun, Image authentication using genetic algorithm; vi, 31 p.; 2016. (Supervisor: Manik Lal Das)
19. Madhu, Prthmesh Rajesh, Deep learning based image super-resolution; x, 47 p.; 2016. (Supervisor: Manjunath V. Joshi)
20. Mangukiya, Manishkumar, Wideband active mixer with high gain and low noise figure; viii, 33 p.; 2016. (Supervisor: Sanjeev Gupta)
21. Meisheri, Hardik, Brain computer interface using electroencephalogram; viii, 48 p.; 2016. (Supervisor: R. Nagaraj and Suman Mitra)
22. Mudliar, Shweta, Distributed medium access control (MAC) protocol at 60 GHz for outdoor wireless networks; viii, 39 p.; 2016. (Supervisor: Laxminarayana S. Pillutla)
23. Nale, Rahul, Design of 16-bit 1MSamples/s differential SAR analog to digital converter; vii, 35 p.; 2016. (Supervisor: Purushothaman)
24. Panchal, Krunal, Two phase automated teller machine transaction for visually impaired; viii, 33 p.; 2016. (Supervisor: Manik Lal Das)
25. Pappan, Shiju, Abstractive text summarization using universal dependency labels, LSA and graph based approach; vi, 19 p.; 2016. (Supervisor: Prasenjit Majumder and CDR DK Singh)
26. Parikh, Ketul D., Object Recognition using Self Learned Features; vii, 46 p.; 2016. (Supervisor: Manjunath V. Joshi)
27. Parikh, Sagar, Design of an interrupt driven processor having deterministic exception response; ix, 44 p.; 2016. (Supervisor: Dr. Amit Bhatt)
28. Parmar, Palas, Reconfigurable hardware implementation of image processing techniques; viii, 53 p.; 2016. (Supervisor: Biswajit Mishra)
29. Patel, Arohi, Automatic Compact Alphanumeric Encoding of Shellcode; vii, 76 p.; 2016. (Supervisor: Anish Mathuria)
30. Patel, Brijeshkumar, Total graph and its characteristics; v, 32 p.; 2016. (Supervisor: Rahul Muthu)
31. Patel, Jaykumar, High Performance Computing; vii, 38 p.; 2016. (Supervisor: Dr. Amit Bhatt)
32. Pokhara, Ankur, Design and Analysis of Energy Neutral Wireless Sensor Nodes for Health and Environmental Monitoring Applications; ix, 50 p.; 2016. (Supervisor: Biswajit Mishra)
33. Rao, Sushant V., Pre-processing using outlier removal in voice conversion; x, 61 p.; 2016. (Supervisor: Dr. Hemant A. Patil)
34. Rathod, Hari, Real-time PID controller for UAV stability; viii, 50 p.; 2016. (Supervisor: Rutu Parekh and Rahul Dubey)
35. Saha, Rupsa, Automatic brain tumour segmentation using rough sets; x, 51 p.; 2016. (Supervisor: Suman K. Mitra)
36. Saxena, Anshiki, On Field Soil Testing using Wireless Sensor Network; viii, 59 p.; 2016. (Supervisor: Sanjay Srivastava and Biswajit Mishra)
37. Shah, Dhruv, Based Regularization for Matrix-Completion Problem: Application to Course Recommender Systems; ix, 58 p.; 2016. (Supervisor: Pratik Shah and Asim Banerjee)
38. Sharma, Manisha, Automatic speech recognition using deep neural networks; x, 57 p.; 2016. (Supervisor: Hemant A. Patil)
39. Sharma, Ritu, Verifiable conjunctive keyword search using authenticated crawlers; vii, 34 p.; 2016. (Supervisor: Maniklal Das and Prasenjit Majumde)
40. Sohoney, Surabhi, Blind inpainting and super-resolution using convolutional neural network; vii, 40 p.; 2016. (Supervisor: Manjunath V. Joshi)
41. Soni, Meetkumar H., Representation learning for speech technology applications using deep learning methods; xiii, 97 p.; 2016. (Supervisor: Dr. Hemant A. Patil)
42. Suthar, Dip, Design of narrowband and wideband low noise amplifier for RADAR applications; ix, 43 p.; 2016. (Supervisor: Sanjeev Gupta)

43. Thakkar, Devang, Tracking and navigation of unmanned aerial vehicle (UAV); viii, 56 p.; 2016. (Supervisor: Rutu Parekh and Rahul Dubey)
 44. Thakkar, Nileshkumar, Enabling technologies for remote health monitoring; viii, 66 p.; 2016. (Supervisor: Biswajit Mishra)
 45. Vyas, Hardik, Computational investigation of patch antennas in plasma environment; xi, 57 p.; 2016. (Supervisor: Bhaskar Chaudhury and Sanjeev Gupta)
 2. Pooshan, Agnihotri, Ahmedabad's Bene Israel; 45 p.; 2016. (Supervisor: Madhumita Mazumdar)
 3. Bhambhani, Divya and Mehta, Miraj, Super Gaadi: vintage cars of vanthali; (Supervisor: Vishvajit Pandya and Madhumita Mazumdar)
 4. Wadhwa, Anchal, Udaan: The Flight of Learning Focus: Unprivileged Children; 43 p.; 2016. (Supervisor: Binita Desai)
 5. Badhan, Akanksha, Stitching Stories: Art of making Chamba Rumal Focus: Himachal Pradesh; 46 p.; 2016. (Supervisor: Binita Desai)
- MDes Project Reports**
1. Mehta, Riddhi, Retreat of the Diaspora; 91 p.; 2016. (Supervisor: Binita Desai)





Annexure 3

FACULTY WITH AREAS OF INTEREST

Regular Faculty

Name of the Faculty	Areas of Interest
R. Nagaraj (Director) PhD (Electrical & Electronics Engineering) Visvesvaraya Technological University	Fault Tolerant Control, Non Linear Control Systems, Neural Networks and Reconfigurable Control Systems
Banerjee, Asim PhD (Electrical Engineering) IIT Bombay	Pattern Recognition, Medical Imaging, Image Processing, Digital Signal Processing, Speech Coding, Software Engineering, Software Quality Assurance and Project Management
Bagler, Ganesh PhD (Computational Biology) CSIR-CCMB Hyderabad and Jawaharlal Nehru University, New Delhi	Computational and Systems Biology, Complex Systems, Complex Networks
Bhateja, Puneet PhD (Computer Science) Chennai Mathematical Institute	Formal Methods used for Testing and Verification
Bhatia, Ashutosh M.E. (Computer Science and Engineering) IISc Bangalore	Design of Efficient Protocols, Algorithms and Architectures for Various Types of Networks and Networking Technologies such as Wireless Sensor Networks, Vehicular Adhoc Network, Body Area Network, Internet of Things, Software Defined Networking and Network Virtualization
Bhatt, Amit PhD (Electrical Engineering) North Carolina State University, USA	Multi core Computer Architecture and Parallel Programming, Low Power Methodology in Digital design
Bhise, Minal PhD (Computer Science) BITS Pilani	Semantic Web, Distributed Databases, Software System Analysis and Design
Chaudhury, Bhaskar PhD (Physics) Institute for Plasma Research (IPR)	Computational Science, High Performance Computing, Computational Physics, Modeling and Simulation of Plasmas, Computational Electromagnetics, Parallel Programming, GPU Computing, Plasma electronics
Das, Manik Lal PhD (Information Technology) IIT Bombay	Information Security, Cryptography, System Design and Analysis
Das, Rajib Lochan PhD (Adaptive Signal Processing) IIT Kharagpur	Adaptive Signal Processing, Compressive Sensing, Image Processing
Dasgupta, Sourish PhD (Computer Science) University Of Missouri-Kansas City, USA	Distributed Multi-Agent System, Service Oriented Architecture, Semantic Web, artificial intelligence
Desai, Binita BFA (Fine Arts) MS University, Baroda, Animation National Institute of Design, Ahmedabad	Animation, Communication Design and Multimedia

Dubey, Rahul PhD (Electrical Engineering) IIT Roorkee	Design and Prototyping of Digital Systems, Factory Automation
Divakaran, Srikrishnan PhD (Computer Science) Rutgers University, USA	Design and Analysis of Algorithms for Problems in Bioinformatics, Machine Scheduling and Distributed Systems
Dutta, Gautam PhD (Physics) Physical Research Laboratory, Ahmedabad	Quantum Computers, Signal Processing, Image Processing, Particle Physics
Garg Gagan PhD (Computer Science and Automation) IISC Bangalore	Information Theory, Cryptography, Number Theory
Garg, Shweta PhD (English) IIT Roorkee	Food and Cultural Studies, Performance Studies, Creative Writing, Literature of the Indian Diaspora
Ghodgaonkar, Deepak PhD (Electrical Engineering) University of Utah, USA	RF and Microwave Engineering, Microwave Sensors, Microwave Instrumentation, Microwave characterization of composite materials, Biomedical applications of microwaves, Electromagnetic imaging of complex dielectric bodies and Wireless data communications
Ghosh, Ranendu PhD (Soil science & Agricultural Chemistry) Indian Agricultural Research Institute, New Delhi	Satellite Remote sensing & GIS, satellite communication applications for rural development, sustainable agriculture system
Gupta, Manish K PhD (Mathematics) IIT Kanpur	Information processing in Biology, Bio-molecular (DNA, Membrane, Cell) computing, Coding and Information theory, Cryptology, Quantum computing, Computational, Structural and Systems Biology and Bioinformatics
Gupta, Sanjeev PhD (Communication Engineering) Queen's University of Belfast, UK	Smart Antennas, Communication and Radar Systems, RF/Microwave Applications
Hiremath, B. N. PhD (Agricultural Economics) University of Kentucky, USA	Sustainable Rural Livelihoods, Food and Livelihood Security at Household Level, Participatory Approaches, Rural Development, Natural Resources and Environmental Economics, Research Methodology
Jat, Pokhar Mal PhD (Computer Science and Engineering) ML Sukhadia University, Udaipur	Databases, Data Mining, Web of Data, Software Design
Joshi, Manjunath V PhD (Electrical Engineering) IIT Bombay	Computer Vision, Image processing, Super-Resolution, Restoration, Signal Processing, Digital Communication
Jotwani, Naresh PhD in Computer Science Rice University, Houston, Texas, USA	Solar Energy, Engineering Design, Economics
Kollipara, Bharani PhD (English Literature) English And Foreign Languages University, Hyderabad	Literature and Philosophy, Ancient Greek Philosophy, Political Theory, Aesthetics



Majumder, Prasenjit PhD (Computer Science), Jadavpur University, Kolkata	Information Retrieval, Natural Language processing, Digital Libraries
Mathuria, Anish PhD (Computer Science) University of Wollongong, Australia	Computer Security
Mazumdar, Madhumita PhD (Modern History) University of Calcutta, Calcutta	Social history of Science, Technology and Medicine in India, Cultures of Communication and The Media
Mishra, Biswajit PhD (Electrical & Electronics Engineering) University of Southampton, UK	Ultra Low Power and Sub-threshold Circuit Methodologies, Very Low Voltage Circuits for Wireless Sensor Networks, Digital IC Design, Power Management for Energy Harvesters, Signal Processing Hardware for Color Image Processing, Geometric Algebra and Novel Hardware
Mitra, Suman Kumar PhD (Computer Science) ISI Calcutta	Image Processing, Pattern Recognition, Fractal, Bayesian Network and Digital Image Watermarking
Modi, Amishal Master of Arts The Ohio State University, USA	English language Teaching Victorian Literature Indian Poetry in English
Mulherkar, Jaideep PhD (Mathematics) University of California Davis, USA	Mathematical Physics, Quantum Computation and Information
Muthu, Rahul PhD (Computer Science) Homi Bhabha National Institute, Mumbai	Graph Theory and Algorithms
Narwaria, Manish PhD (Computer Engineering) Nanyang Technological University, Singapore	Multimedia Signal Processing
Pandya, Vishvajit PhD (Anthropology) University of Chicago, USA	Material Culture, Design and Communication Culture, Visual Anthropology, Rituals and History with specific reference to Colonialism
Parikh, Alka PhD (Agriculture and Allied Economic) Cornell University, USA	Rural development and the related issues like Agriculture, Poverty, Unemployment and Wages, Rural Finance, Environment and Development, Disaster Management
Parekh, Rutu PhD (Electrical Engineering) Sherbrooke University, Sherbrooke, Quebec, Canada	Nanoelectronics, Nano Device-CMOS Hybridization, Design and Simulation, Circuit Design, Modeling and Simulation of Next-Generation Memory (PCM), Nanofabrication
Patil, Hemant PhD (Signal Processing) IIT Kharagpur	Speaker Recognition and Wavelet Signal Processing
Pillutla, Laxminarayana PhD (Electrical Engineering) University of British Columbia, Canada	Statistical Signal Processing, Information Theory, Game Theory, Non-Linear Optimization, Wireless Sensor Networks, Cognitive Radio, Cross Layer Design of Wireless Networks

Purushothaman A. PhD (Information and Communication Technology) DA-IICT, Gandhinagar	Analog and Mixed circuit Design, Cmos Digital Integrated Circuits, Low Power VLSI
Raut, Manoj Kumar PhD (Mathematics) IIT Madras	Logic in Computer Science
Roy, Anil PhD (Physics) IIT Delhi	Fibre Optics and Optical Communication, Quantum Optics, Nanotechnology, Semiconductor Devices, ICT Applications in Rural Development
Sahu, Nabin Kumar PhD (Mathematics) IIT Kharagpur	Applied Functional Analysis, Operator Theory, Variational Inequality, Variational Inclusion Problems
Sarkar, Aditi Nath MA (South Asian Languages and Civilizations) University of Chicago, USA	Literature, Religious, Cultural History; South Asian Civilization Studies.
Sasidhar, P S Kalyan PhD (Computer Science and Engineering) University of North Texas-Denton, Texas, USA	Mobile and Pervasive Computing
Srivastava, Sanjay PhD (Physics) University of California, Los Angeles, USA	Computer Networks: Protocol Modelling, Simulation
Sunitha, V PhD (Mathematics) IIT Madras	Algorithms, Discrete Mathematics, Graph Theory, Parallel & Distributed Computing, Theoretical Computer Science, Interconnection Networks
Tatu, Aditya PhD (Image Analysis) University of Copenhagen, Denmark	Applications of Differential Geometry (Shapes, Curve Evolutions etc.) Image features, Continuous optimization.
Tiwari, Mukesh PhD (Optical Science & Engineering) University of New Mexico, USA	Statistical Physics, Non Linear Dynamics, Quantum Transport, Surface Science
Tiwari, Saurabh PhD (Software Engineering) IIITDM, Jabalpur	Requirement Engineering, Empirical Software Engineering, Evidence-based Software Engineering, Safety Analysis, Model-based Testing
Vasavada, Yash PhD (Wireless Communications) Virginia Polytechnic Institute and State University, USA	Wireless Communications, Satellite Communications, Signal Processing, Detection and Estimation Theory, Information Theory and Coding Theory, Machine Learning and AI, Cognitive Communications, LTE and 4G/5G, MIMO Channels



Adjunct Faculty

Name of the Faculty	Areas of Interest
Banerjee, Nandini M.Phil., PhD R D University, Jabalpur	Economics & General Management
Banerjee, Soumitra PhD (International Business Strategy) University of Belford, Texas, USA	Start-up Ventures, Product Development, Business Strategy, Productivity and Communication
Singh, Indrani Choudhury PhD (Environmental Science) Space Application Centre, ISRO, Ahmedabad	Agruculture, Environmental Science, Agroculture Statistics
Bhaskaran, Bala BTech-IIT Madras, PGDM-IIM Bangalore, CFA, CMC	General Management, Financial Management and Analysis, Development Banking, Strategic Leadership
Dasgupta, Kuntala B.Sc. Calcutta University	Rabindra Sangeet, North Indian, Classical, India Film Music and History.
Doctor, Khushru MCA, CISA, PMP, CSM, Six Sigma Green Belt.	Software Engineering, Project Management, Agile Development Practices.
Day, Shalini Post Graduation in Information & Digital Design National Institute of Design, Ahmedabad	Information Design, Interaction Design, User experience Design, User centred design processes, Design thinking, Design research, Typography
Jha, Kamal Kishor PhD (VLSI Design), ABV-IIITM, Gwalior	Device-Circuit Co-Design, Hybrid Device-Circuit Interaction, Novel Semiconductor Device Design and Modeling
Naveen Kumar PhD, DA-IICT, Gandhinagar	Information Security and Privacy, Cloud Computing
Ashish Phophalia PhD, DA-IICT, Gandhinagar	Image Processing, Pattern Recognition, Medical Image Analysis
Zunnun Narmawala PhD, DA-IICT, Gandhinagar	Network Coding, Mobile Social Network, Delay Tolerant Network
Brahmbhatt, Kaushik PG in Journalism, Public Relation & Advertising, PG in commercial Photography, PG in Performing Art-Pupperty.	Photography, Performing art, Pupperty
Patel, Bhavesh MDes, DA-IICT, Gandhinagar	Music, Movies and Sports
Patel, Narendra Dip. in Fine Arts, Kala Neketan, (Now Government Institute of Fine Arts) Jabalpur, Dip. in Visual Communication (Animation Film), National Institute of Design,(NID) Ahmedabad	Film & Animation film, HFX, Communication Design, eLearning, Photography, Web Design, Multimedia, Graphics user Interface, Software Development, Printing Technology

Nagchoudhuri, Dipankar PhD (Electrical Engineering, Michigan State University, USA)	VLSI Design, CMOS Circuits And Technology, Biomedical Signal Processing Chip Design
Rangwala, Tanvi MS, University of Southern California, USA	Computer Science, Entrepreneurship
Raval, Nikhil MBA (Strategic Management) California State University, USA	Strategy and Finance
Sengupta, Amit MBBS, MD(OBS-GYN), PhD (Biomedical.Engg.-IIT-Delhi, MROGS(ROM)	Medical Electronics, Instrumentation, Imaging, Affordable Technology, Woman's health, Cancer, high risk obstetrics, and feto-maternal monitoring, Vascular & reproductive bio-engineering
Sisodia, Diksha PhD(Management) University of Connecticut, USA	Operations Management, Quantative Techniques, Business Research Methodology
Khetan Lokesh MDes, DA-IICT, Gandhinagar	Multimedia Design, Web Design, Graphic Design and Photography
Yagnik, Jignasu MBA (Strategic Management) California State University, USA	Management Information System





Annexure 4

STAFF

Registrar

Soman Nair, Executive Registrar

Academic Programs

Jigar P Yagnik, Deputy Registrar (Academic)
Jalpesh Pandya, Assistant Registrar (Academic)
Dinesh Prajapati, Senior Programmer
Suryakant Goswami, Senior Programmer
Nandini Banerjee, Counselor
Jainik Patel, Academic Assistant

Administration & HR

Hasendrasinh Jhala, Head-HR & Admin.
Rajesh V Patel, Estate Engineer
Sudhir Dave, Commercial Officer
Bhavesh Shah, Senior Stores Assistant
Kiritkumar Pandya, Assistant Administrative Officer
Gyanesh Pandya, Senior HR Assistant
Niketa P Raval, Receptionist-Cum-Office Assistant
Keshurbhai M Zala, General Assistant
Bahadursinh M Veghela, Driver

Accounts

Geeta Mehta, Chief Accounts Officer
Santosh Pandit, Assistant Accounts Officer

Director/Dean/Registrar/Faculty Offices

Venugopal PR, Executive Secretary to Director
Abhilash Bhaskaran, Senior Secretary for Registrar's Office
Satyabir Singh, Senior Secretary to Dean(AP)
Mukesh Thaker, Secretary to Dean (R&D)
Deepa Poduval, Secretary Faculty Block 2
Geeta S Nair, Secretary Faculty Block 4

Placement & Continuing Education Program (CEP)

Sunil Kumar Jain, Manager-Placement & CEP
Gauri Wagenaar, CEP officer
Anuradha Srivastava, Secretary

Resources Centre

Prasanna Kumar Muduli, Assistant Librarian
Shashikumara A A, Assistant Librarian
Nitesh Singh Pawar, Professional Assistant
Virendra Sathwara, Library Trainee
Subrat Kumar Nanda, Library Trainee
Surendra Kumar Soni, Library Trainee
Vipul Banker, Library Trainee
Manish Goswami, Library Attendant
Mukesh Shrimali, Library Attendant [Contractual]

Computer Systems

Nimesh B Patel, Manager (IT & Systems)
Prabhunath Sharma, Senior Design & Systems Assistant

Laboratory

Rajendra Shah, Laboratory Superintendent
Ramesh Prajapati, Deputy Laboratory Superintendent
Krupa Kinkhabwala, Senior Laboratory Assistant
Sanjay Bariya, Senior Laboratory Assistant
Krunal G Patel, Senior Laboratory Assistant
Firoja Shiekh, Laboratory Assistant
Bhargav Patel, Laboratory Assistant
Naresh Patel, Laboratory Assistant

Sports office

Dharamsingh Karmyal, Sports Officer
Shirish Varma, Sports Assistant

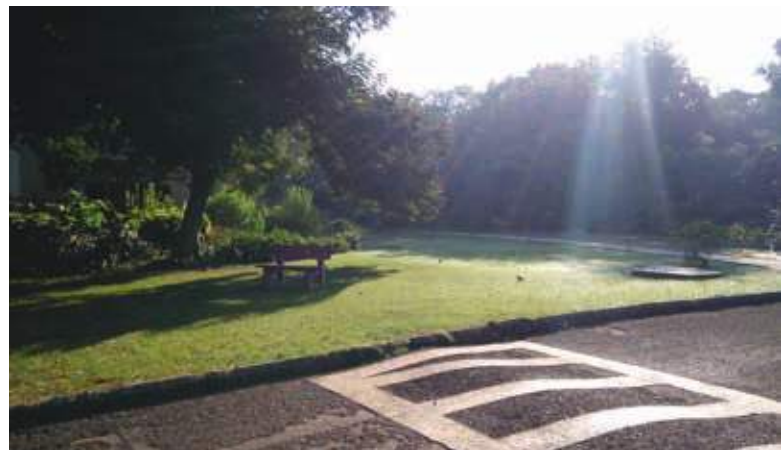
Hostels

Jitendra Parmar, Senior Hostel Supervisor
Sawankumar Sachaniya, Hostel Supervisor



Project Staff 2015-16

1. Alpesh Sathwara, IT Manager in DCEI Project CEID Project wef 11 April 2011 Supervisor Manish Kumar Gupta.
2. Vishnu Deepika Pathapati, Manager-DCEI Project CEID Project wef 17 June 2016 Supervisor Manish Kumar Gupta.
3. Hardik Sailor, Project Personnel-A ASRC-II Sponsored project wef 01 April 2016 Supervisor Hemant Patil.
4. Pankaj Chaudhary, Junior Research Fellow, UWDRA ISRO Sponsored project wef 12 January 2015 Supervisor Deepak Ghodgaonkar.
5. Tanvina Patel, Project Personnel Project Personnel Category-A TTS Indian Languages Phase II wef 21 May 2012 Supervisor Hemant Patil.
6. Nirmesh Shah, Project Personnel Category-B TTS Indian Languages Phase II wef 16 May 2012 Supervisor Hemant Patil.
7. Mohammadi Zaki, Project Personnel Category-A DIT TTS sponsored project wef 18 February 2014 Supervisor Hemant Patil.
8. Ankit Nagpal, Project Personnel Category-B ASRC-II sponsored project wef 12 December 2014 Supervisor Hemant Patil.
9. Pramod Bachav, Project Personnel Category-B ASRC-II sponsored project wef 12 December 2014 Supervisor Hemant Patil.
10. Avni Rajpal, Project Personnel Category-B ASRC-II sponsored project wef 12 December 2014 Supervisor Hemant Patil.
11. Jainisha Sankhwara, Project Personnel (CLIA Sponsored project wef 1 June 2015) Supervisor Prasenjit Majumder.
12. Parth Mehta, Junior Research Fellow (CLIA sponsored project wef 21 May 2012) Supervisor Prasenjit Majumder.
13. Purvi Koringa, Senior Research Fellow (TRFPRV Sponsored project wef 12 June 2013) Supervisor Suman Kumar Mitra.
14. Ashish Phophalia, Reseach Associate, (TRFPRV Sponsored project wef 4 January 2013) Supervisor Suman Kumar Mitra.
15. Tushar Vilas Kokane, Junior Research Fellow (MBHM sponsored project wef 1 May 2015) Supervisor Manoj Kumar Raut.
16. Milind Padalkar, Junior Research Fellow (IDH-Hampi sponsored project wef 1 August 2011) Supervisor Manjunath V Joshi.
17. Bhumika Chauhan, Project Assistant (AHSUMC II sponsored project wef 1 March 2015) Supervisor Gaurav Mishra.
18. Miral Shah, Junior Research Fellow (DAEBRNS sponsored project wef 22 March 2016) Supervisor Bhaskar Chaudhary.
19. Abhishek Jani, Research Engineer (VAGT sponsored project wef 01 December 2015) Supervisor Anil Kumar Roy.



Annual Report Committee

Shri Soman Nair | Prof Suman K Mitra | Prof Anish Mathuria | Prof Sanjeev Gupta | Prof Ranendu Ghosh | Prof Alka Parikh | Prof Shweta Garg