

# ANNUAL REPORT 2012 2013



**Dhirubhai Ambani  
Institute of Information and Communication Technology**

Near Indroda Circle, Gandhinagar, Gujarat, India 382 007.

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August 2012 – July 2013



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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



### President

Shri Anil D Ambani	Chairman, Reliance Group, Mumbai
Prof R Natarajan	Former Chairman, AICTE and former Director, IIT Madras, Chennai
Prof B S Sonde	Former Professor, Indian Institute of Science, and former Vice Chancellor, Goa University
Prof Ashok Jhunjhunwala	Professor, Indian Institute of Technology Madras, Chennai
Prof S C Sahasrabudhe	Director, DA-IICT
Shri A M Tiwari	Principal Secretary Dept of Higher and Technical Education Govt of Gujarat, Gandhinagar
Shri S J Haider	Principal Secretary Dept of Science and Technology Govt 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
Shri Vinay Gupta	Reliance Communications Limited, Mumbai
Shri Anil Nahata	Reliance Communications Limited, Mumbai
Shri Vishwas Joshi	Reliance Communications Limited, Mumbai
Prof Sanjay Chaudhary / Prof Sanjeev Gupta	Dean (Academic Programs), DA-IICT
Prof Anish Mathuria	Dean (Research & Development), DA-IICT
<b>Secretary</b>	
Shri Soman Nair	Executive Registrar, DA-IICT

For the rest of the Institute Management, please see **Annexure 1**



## Director's Page



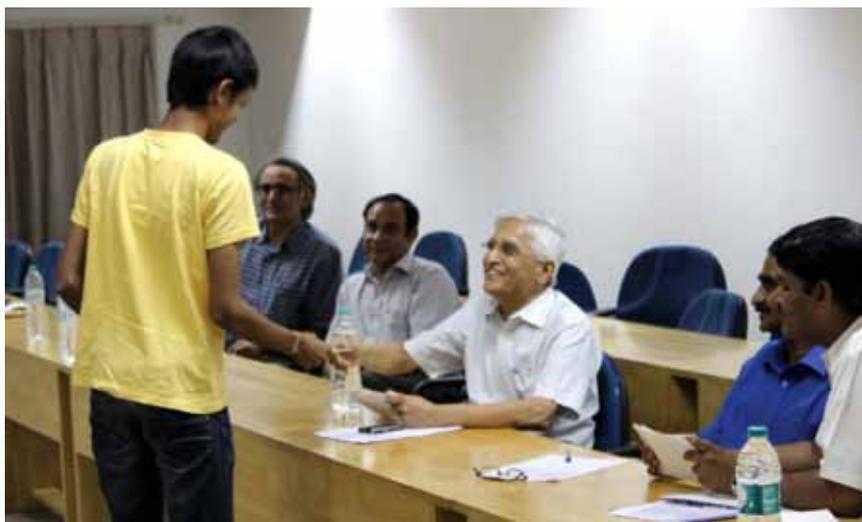
### **Prof S C Sahasrabudhe**

This report looks at the progress of DA-IICT in the year 2012-13. It has been a year of steady progress and consolidation on all fronts. The response to the new B Tech (Hons) Computational Science programme has been excellent. This year we have accepted the challenge of mentoring a new institute, IIIT, Vadodara, which is being set up under a plan of Government of India. This report will enable the reader to get an overview of the developments and assess how far we have come.

A capable faculty that values scholarship and research, and a motivated and gifted student body, are two essential ingredients for our march towards our stated objectives. The Institute has tracked these two targets painstakingly and has explored all possibilities. As we seek to establish ourselves in the academic community, we have tried to reach out to our peers all over the world for co-operation in research and education. We hope to extend this reach in the years ahead.

By making this report an open document easily available to all, we offer ourselves to closer and critical public scrutiny, and welcome comments and constructive suggestions from everyone.

Prof S C Sahasrabudhe  
Director



## About the Institute

### The Institute

The Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), established in 2001, is registered as a Charitable Society under the Societies Registration Act, 1860, and Bombay Public Trust Act, 1950. In 2003, Government of Gujarat declared DA-IICT as a University under an Act of the Gujarat State Legislature (Act No. 6 of 2003). In November 2004, the University Grants Commission has recognized DA-IICT as a private University under Section 2(f) of the UGC Act. The Association of Indian Universities (AIU) has admitted DA-IICT as a member of AIU in 2009.

DA-IICT seeks to invoke the broader vision of the late Shri Dhirubhai Ambani, the founder of the Reliance Group, and weave both knowledge and innovation as part of an evolving style. It is visualized as a research-driven institution embodying the vision of India as a knowledge society. It is the only advanced research, teaching and training institution on Information and Communication Technology (ICT) named after the late Shri Dhirubhai Ambani.

DA-IICT offers two unique undergraduate programs, BTech in Information and Communication Technology and BTech Honours in Computational Science, the first of its kind in India. The BTech Honours program in Computational Science has been launched

from the academic year 2013-14. Besides these programs, the Institute offers a variety of academic programs at post-graduate and doctoral levels. DA-IICT also designs and offers continuing education programmes in ICT to upgrade the skills and competence of professionals, government officials and defence service men. Research initiatives of DA-IICT are aimed at technological development and the enhancement of interaction with leading industries and organisations in India and abroad.

DA-IICT places great importance on having a highly qualified and research-oriented faculty. The faculty's background is fairly international; majority of them have returned from abroad after obtaining their doctorates and teaching in reputed universities. They are known for their research achievements and innovative teaching skills.

The Institute has built up a stellar reputation in a short period of twelve years and made significant contributions to ICT. The authoritative DataQuest CMR T-School Survey 2012 has included the Institute in the club of ten Technology Schools in the country immediately next to the long established Indian Institutes of Technology. The DA-IICT is the only private University in the top ten and thus is ranked as the topmost private technology university in the





country. The ABP News National B-School Awards declared DA-IICT as the outstanding engineering Institute in West India in 2013. The graduates of the Institute have been employed by the public sector, industry, Civil Society Organizations (CSOs), and academia. They are highly rated by these organisations, both technically and professionally. A significant number of graduates have started their own enterprises.

Government of Gujarat has invited DA-IICT to mentor the new Indian Institute of Information Technology, Vadodara (IIIT-V), set up in the Public-Private Partnership mode. The invitation was extended recognising that DA-IICT is competent to guide IIIT-V at its infancy stage and has the experience and competence to create the right culture and environment to generate a pool of technically sound and globally competent professionals.

### Location

Gandhinagar, the capital of Gujarat, is a modern twin city for Ahmedabad and is fast emerging as a knowledge city. After the establishment of an Information Technology park (Info-City), DA-IICT was founded at Gandhinagar as the first node of an institutional concentration which would transform Gandhinagar into a knowledge city. The subsequent

range of institutes, inter alia, includes campuses of the Indian Institute of Technology, National Institute of Design, Pandit Deendayal Petroleum University, Central University of Gujarat, Gujarat National Law University and National Institute of Fashion Technology.

The city constitutes a knowledge hub and an ecological corridor rendering it into a green city. The Institute can be reached in about 30 minutes from the Ahmedabad airport and railway station.

### Campus

The architecture of DA-IICT is functional, but what surrounds it is a fascinating garden. The entire design was oriented towards preserving the environment. There are over 2500 trees, mostly belonging to indigenous varieties. The lawn area measures roughly 50,000 square meters. Over 3000 bamboos were planted to mask the concrete. Adjacent to the Resource Centre stands a herb garden with many species of rare medicinal plants. The entire landscape was planned and developed in such a manner that no excess rainwater is lost and all irrigation is carried out with recycled water. Many species of birds have been observed in the campus and it is a haven for bird-watchers.



## Academic Programs

DA-IICT is the first Institute in the country which designed and offered teaching programs in Information and Communication Technology. During the reporting period, DA-IICT had decided to add one more feather to its cap by launching the first ever undergraduate honours program in ICT with Minor in Computational Science. Thus it now offers one undergraduate program in ICT, one undergraduate honours program in computational science, four post-graduate programs and one doctoral program.

All these programs have significant research and development components. The faculty are credited with several research contributions. This is reflected in their teaching and their commitment to the vision of “research-led teaching” of the Institute. Besides these teaching programs, DA-IICT offers short-term training programs, research seminars and workshops under the Continuing Education Program (CEP). The details of the academic programs offered from the academic year 2013-14 onwards are given in Table 1.

Table 1: Academic Programs

Sr. No.	Programs	Commencement	Duration (Years)	Annual Intake*
1	BTech (ICT)	2001	4	240
2	BTech (Honours) (ICT with minor in Computational Science)	2013	4	60
3	MTech (ICT)	2002	2	50
4	MSc (Information Technology)	2002	2	90
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 foreign students

### CURRICULUM REVISION AND NEW UG PROGRAM

The Institute was planning to introduce a BTech (Honours) program in Computational Science. A special consultative session to design and launch this undergraduate program was held in November 2012 at DA-IICT. It was attended by DA-IICT faculty and the experts and representatives from Research Laboratories, Industry and Academia (TCS-HPC) (High Performance Computing), Pune; IBM Research Centre, New Delhi; Centre for Development of Advanced Computing, Pune; CSIR (Centre for Mathematical Modelling and Computer Simulation), Bangalore; Physical Research Laboratory, Ahmedabad; Indian Institute of Technology, Kanpur; Indian Institute of Technology, Gandhinagar, and

Indian Institute of Science, Bangalore. Consensus was reached to offer a four year BTech (Honours) Program with major in ICT and minor in Computational Science. The program is launched from the academic year 2013-14.

The revised curriculum of MSc (IT) would be implemented from the academic year 2013-14. The review process for MDes (CD) and MSc (ICT-ARD) programs is now in progress.

### ADMISSIONS

#### Undergraduate (UG) Programs

The notification for admission to the BTech (ICT) and BTech (Honours in ICT) (CS) was issued in leading regional and national newspapers in June 2013. As



many as 6561 candidates applied for admission to these programs. Of the total 300 seats, 50% of seats were filled in on national basis and the remaining 50% were filled through the Admission Committee for Professional Courses (ACPC), Government of Gujarat, admitting Gujarat-domiciled candidates. Both sets of admissions were based on the All India Rank of Joint Entrance Examination 2013 (JEE-2013) Main, which was conducted by the Central Board of Secondary Education. A few seats were offered to Non-Resident Indians, Foreign Nationals and Persons of Indian Origin and admissions were granted on the basis of the SAT/JEE 2013 score. The Institute follows the required 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 below.

The eligible students and their parents were invited to participate in open sessions during July 2013, soon after online counselling sessions. During these sessions, the students and their parents gained first-

hand information about the Institute's programs, faculty, campus and infrastructure facilities. Subsequent to these sessions, 293 students were admitted. In addition, three students were admitted through Direct Admission of Foreign Student (DAFS) Channel.

A unique feature of the BTech programs is the mandatory rural internship, which is expected to give the student a feel of his/her social milieu and is typically carried out with NGOs. The student is also required to take a six-week industrial/research internship at the end of the third year of the program. The student has a choice of taking an industrial internship or a research internship depending on his/her career goals. Finally, the student is required to take a project during which he/she is required to demonstrate the ability to learn current areas of research and/or industrial interest, the ability to utilize the topics learnt during the stint in the program and the ability to express creative and design abilities.

Table 2: JEE Merit Ranks of Students

Rank	Category	BTech (ICT)	BTech (Honours) (CS)
Best JEE Rank	All India (Gen)	1,766	1,604
	Gujarat (Gen)	2,225	686
Lowest JEE Rank	All India (Gen)	14,829	11,137
	Gujarat (Gen)	52,529	31,124

## Postgraduate (PG) Programs

The admission to all PG programs, except the MTech program, was done on the basis of merit rank in the entrance test conducted by the Institute.

For the MTech program, admission was carried out on the basis of the GATE score in the disciplines of Electronics and Communication, Computer Science and Information Technology only. Applicants having a BTech/BE degree in ICT or allied disciplines or MSc degree in Mathematics, Physics, Electronics or Statistics were eligible.

For admission to MSc (IT) program, a national-level online entrance test was conducted at various centers. For the MSc (IT), students were admitted solely on the basis of their merit rank. A specially designed admission test was conducted for admission to MSc (ICT-ARD) and MDes (CD) programs and the final selection was made on the basis of the entrance test and interviews with selection committees. The details about the entrance test dates for different programs are given in Table 3.

Table 3: Entrance Test Details

Programs	Test Location	Date
MSc (ICT-ARD)	On-line at major cities in India	7 April 2013
MSc (IT)	On-line at major cities in India	15 June 2013
MDes (CD)	DA-IICT Campus, Gandhinagar	3 July 2013
PhD	DA-IICT Campus, Gandhinagar	2 July 2013

Table 4: Admissions Details

Programs	Application Received	Admission Offers
MTech (ICT)	992	50
MSc (IT)	779	90
MSc (ICT-ARD)	76	10
MDes (CD)	31	7
PhD	125	8

Table 4 shows the total intake of each program and the number of students admitted at the end of the admission process.

DA-IICT has an MoU with the Indian Space Research Organisation (Space Application Centre) to admit their employees into the PhD program. The candidates are selected after a rigorous admission screening carried out at SAC, followed by an interview by a Selection Committee at DA-IICT. During the academic year, one scientist of SAC was admitted to the PhD program.

### Orientation

All new UG and PG entrants reported to the campus one week before the commencement of the classes for orientation. During the general orientation, the UG students were given detailed account of the curriculum, academic requirements and policies. The students were taken on a tour of the campus to familiarize them with the facilities and resources available on the campus. They met instructors of the first semester courses for briefings. Similar sessions were organized program-wise for the PG students,

with emphasis on the details of the 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. All new entrants were exposed to various aspects of engineering with emphasis on ICT. An orientation/workshop on Teaching Assistant (TA) was also conducted for all PhD and MTech students who joined the Institute in the academic session 2013-14.

### FINANCIAL SUPPORT

The Institute provides financial support in the form of scholarships and assistantships to eligible students; the details are given below.

#### Scholarships

The Institute offers Merit Scholarship and Merit-Cum-Means Scholarships to BTech (ICT) students. In each category, upto five students are awarded scholarships at the beginning of every academic year. The scholarship amount covers full tuition fees of each semester for the entire duration of the



program. Merit scholarship is awarded to all the students having JEE All India Rank up to 5000. During the reporting year, 8 students of 2012 batch qualified to receive the Merit Scholarship. The Merit-cum-Means scholarship is awarded to students where the annual income of the parent(s)/guardian(s) is not above Rs. 2,50,000/-. During the reporting year, 5 students of 2012 batch were awarded Merit-Cum-Means Scholarships.

### Assistantships

The Institute offers full-time and half-time teaching assistantships to students of the MTech (ICT) and PhD programs. The half-time teaching assistantships are also offered to qualified final year BTech (ICT) students.

### THESES

#### Master's Theses

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

### INSTITUTIONAL COLLABORATION AND STUDENT EXCHANGE PROGRAMS

To promote the academic and research interaction as well as collaboration, DA-IICT and IIT-Gandhinagar, signed an MoU on 2 July 2012. DA-IICT welcomes students from other institutions to carry out internships or project work under the guidance of our faculty. Most of the trainees arrive during the summer semester when it is usually possible to provide hostel facilities as well as use of the Laboratories and Resource Centre.

The Network of Engineering Institutions (NEI), a co-operative endeavour, is to promote the quality of PhD research. With the help of experts from various IITs, notably IIT-Bombay, and IIT-Delhi, the program is envisaged to form a network of engineering education institutions (henceforth referred to as NEI) with the objective to cooperate towards enhancing research activities at Ph.D. level. Currently, the NEI includes DA-IICT, MITS, LNMIIT and YCCE as member institutions. The major emphasis in the program is to provide quality courses through Workshops conducted and evaluated by experts, which could be included in the transcripts of the PhD scholars at the discretion of the Member Institutions. There is also an Interactive Forum for exchange of views and ideas. This forum is meant to enable sharing of research resources and provide mentorship to PhD scholars.

### CONTINUING EDUCATION PROGRAM (CEP)

Continuing Education Program (CEP) has been identified as a knowledge sharing program to train on-the-job researchers, academicians, professionals from industries and government organizations. CEP is explored by those who were interested in developing ICT and related skills. The Institute provides end-to-end services in training and development of professionals of Corporates, Government Organizations, Educational Institutes for the transfer of knowledge and enhancement of skills in the areas of Information and Communication Technology like GIS, VLSI technology, Embedded Systems, Computer Vision and Image Processing, Wireless Communications, Network Administration and Security, Linux, Database Management, Software Testing, Soft Skills. So far many such courses have been conducted for Indian Airforce. During the reporting year, the following programs were conducted:

Sr.No.	Program	No. of Candidates	Duration
1	Soft Skills Training - I	40	10 days
2	Linux Networking and System Administration	24	1 week
3	Soft Skills Training - II	40	2 weeks
	Total	104	

## INSTITUTIONAL AWARDS



The ABP News National B-School Award was conferred on DA-IICT for the second time in 2013, in recognition of leadership, development and industry interface. The ABP News, formerly known as Star News Channel, is a Leading News channel of India.



DA-IICT was among the top 20% engineering colleges winning National Employability Award 2013 instituted by Aspiring Minds.



Tata Consultancy Services Limited selected DA-IICT for the 'TCS-100 Best' high-ranking engineering institute student award scheme. The 'TCS-100 Best' is to enhance students' attention towards academics through healthy competition. Following two students of DA-IICT were selected for 'TCS-100 Best' Award in 2013:

Poojan Shah, BTech (2008-12 batch)  
Raghuvir Songhela, BTech (2009-13 batch)

DA-IICT is also recognized by TCS to administer the TCS Research Scholar Program. Under the program, selected scholars admitted to pursue Doctoral Studies at DA-IICT are awarded Fellowships. During the reporting year, Ms. Gitam C Shikkenawis, PhD Scholar admitted in 2012, was selected for the award of TCS Doctoral Fellowship.



Dr K Keshavswamy, Head, Academic Interface Program, TCS, handed over cash prizes, gold medals and certificates to them at DA-IICT on 1 March 2013.

### MoUs signed



**RAMAKRISHNA SARADA SEVASHRAM DHARAMPURA**

Ramakrishna Sarada Sevashram, Bastar, Dharampura.

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



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

To collaborate with each other and 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.



eiTRA-eInfochips Training & Research Academy 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.

Prof Anish Mathuria receiving ABP News National B-School Award in Taj Lands End, Mumbai on 29 June 2013



# Placements and Internships

## PLACEMENTS

DA-ICT has been one of the most preferred institutes by recruiters. Every year fresh recruits are placed in top-notch companies. Our placement season of 2012-13 has been a huge success, with the highest package touching ₹20 lakh per annum (offered by *Directi*) and the average package being ₹5.54 lakh per annum. A good number of students have been recruited by *Directi*, Qualcomm, Flipkart, Amazon, Morgan Stanley, Deloitte, ZS and many more. We were also visited by Facebook and Google, where our students proved their potential by being shortlisted for the final rounds. More than 54 companies participated in the campus placement season for 2012- 2013 batch. This placement season saw recruiters from a spectrum of industries offering job profiles like software engineers, business analysts and graduate engineer trainees. It is encouraging

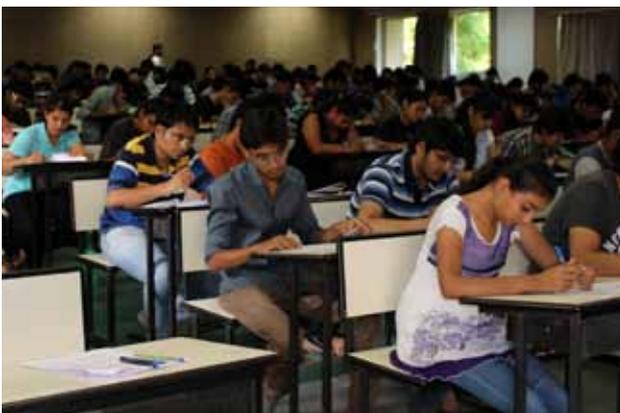
that our placements were unaffected by the general economic uncertainty. Our students also received pre-placement offers from more than one company based on the performance during their summer internship.

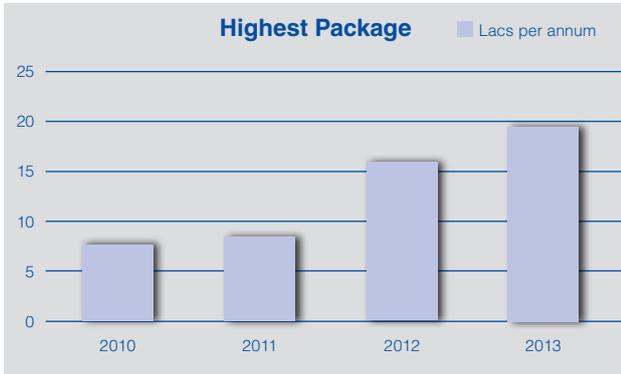
Other companies that visited campus this year included Microsoft, Deloitte US, Sapient Nitro, ZS Associates, Samsung, Maxim, Evosys, Saba Softwares. Many students were also offered project internships in premier research institutions such as Bell Labs, ISRO and IBM and in companies like Capillary, Amazon and Oracle. This year's placement process benefited junior batches also with many of them securing summer internships in these organisations.

Placement 2012-13

	BTech	MTech	MSc (IT)	MSc (ICT-ARD)	Total
Eligible Students opting for Campus Placement	142	45	88	9	284
Students opting out of Campus Placement	66	5	1	1	75
Total	208	50	89	10	359

	BTech	MTech	MSc (IT)	MSc (ICT-ARD)	Total
Number of jobs offered (including double offer)	156	36	45	7	244
Number of jobs accepted	131	33	41	6	211





## INTERNSHIPS

The BTech students are required to undertake a Research or Industrial Internship for 6 to 8 weeks duration at the end of their sixth semester. They work with an academic institution or a research and development unit of an industry or an R&D organization. Its purpose is to expose the student to a research environment under the supervision of an expert in an ongoing work. The Industrial Internship exposes the students to the working environment in industry with an expectation that such exposure would equip 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 on application of theory to practical work situations.

### Research Internship

During the academic year, 146 students undertook research internship with the following seven institutions (Table 1):

Table 1: Research Internships

Sr. No.	Name of the Organization/ Institution	Number of Students
1	Carnegie Mellon University, Pittsburgh, USA	3
2	International Institute of Information Technology, Hyderabad	2
3	Indian Institute of Public Administration, New Delhi	1
4	Indian Institute of Technology Bombay, Mumbai	3
5	Institute of Mathematical Sciences, Chennai	1
6	Ramakrishna Sarada Sevashram, Chhattisgarh	4
7	Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar	132



## Industrial Internship

During the academic year, 86 students opted for research internship in 56 private-sector institutions. Among the 86 students, 8 went to TCS, Gandhinagar; 6 to Qualcomm India Pvt. Ltd., Hyderabad; 4 to

Likenone Marketing Solutions Pvt. Ltd., Ahmedabad, 3 each to Amazon, Bangalore, and Wishtree Technologies, Ahmedabad; other industries sponsored 1-2 students each (Table 2).

Table 2: Industrial Internship Organisations

ACTY System India Pvt. Ltd., Mumbai	JK Paper Mills Ltd., Odisha	Playpoer Labs Pvt. Ltd., Gandhinagar
Amazon, Bangalore	KMG Infotech, Gurgaon	Plenar Technologies, Ahmedabad
Aricent Group, Gurgaon	KPIT Cummins Infosystems Ltd., Pune	Pratham Solutions Pvt. Ltd., Jaipur
AXIS Bank, Indore	L&T Power Project Management Services, Vadodara	Qualcomm India Pvt. Ltd., Hyderabad
BISAG, Gandhinagar	Likenone Marketing Solutions Pvt. Ltd., Ahmedabad	Reliance Communications, Mumbai
Bit Mapper Integration Technology, Pune	Line O Matic Graphic Ind, Ahmedabad	Reliance Jio Infocomm Ltd., Mumbai
Blogtard Pvt. Ltd., Ahmedabad	Max Mobility Pvt. Ltd., Kolkata	Scilab Enterprises, Versailles, France
BSNL, Jaipur	Mentor Graphics, Noida	Stematix Infotech pvt Ltd, Indore
Capgemini India, Mumbai	Animedia, Ahmedabad	Suruchi Digiworld, Patna
Champs PLC, Lagos, Nigeria	NIC, New Delhi	Survase Education LLP, Mumbai
CIIE, IIM, Ahmedabad	ONGC, Dehradun	Tata Motors, Pune
Cynapta Software Pvt. Ltd., Udaipur	PerfectVips, Ahmedabad	TCS, Gandhinagar
Datascan Information Technology Pvt. Ltd., Patna	Green Circle Technology, Patan	VBSOFT (India) Limited, Ahmedabad
Digital Jalebi, New Delhi	Grid Ant Technologies Pvt. Ltd., Ahmedabad	Wishtree Technologies, Ahmedabad
Dr ITM, Jaipur	Hindustan Zinc Limited, Udaipur	Four Pebbles Edu Solutions Pvt. Ltd., Surat
E Brain Software, Bangalore	Hitachi Hi-Rel Power Electronics, Gandhinagar	Zymr Systems, Ahmedabad
Entourage Solutions, Ahmedabad	Infinity Infoway Pvt. Ltd., Rajkot	
GAIL (India) Ltd., Chandigarh	Invision Software Solution, Gandhinagar	
Google, Bangalore	Iteration Labs LLC, San Francisco, USA	
Gray Routes, Mumbai	Jet Wave Solutions Pvt. Ltd., Bhopal	



## Rural Internship

The BTech students have to undergo a four-week Rural Internship as a part of BTech curriculum after third semester so that students of Information and Communication Technology get exposure to social and economic realities of rural India. Under Rural Internship, the students were assigned to various organizations known for their innovative approaches to rural development from 7 December- 28 December 2012. Of a total of 214 eligible students, 205 students

(163 male and 42 female) completed their Rural Internship successfully in various parts of India.

The students were placed in 59 Non-Governmental Organizations (NGOs) in 10 states across India. The highest numbers of students were placed in Gujarat, followed by Rajasthan, Andhra Pradesh and Delhi. Details appear in Table 3.

Table 3: State-wise Non-Governmental Organizations (NGOs) participating in Rural Internship Program 2012

Sr. No.	State	Non-Governmental Organization
1	Andhra Pradesh	•Deccan Development Society •Health and Education for All •Padma Education and Charitable Trust •Sri Gowthami Urban and Rural Integrated Development and Educational Society •Uma Educational and Technical Society
2	Chhattisgarh	•Ramkrishna Sarada Sevashram
3	Delhi	•Jeevothan Foundation •Vatsalya Mandir •Bharat Lok Shiksha Parishad
4	Gujarat	•Abhyudhan Gram Vikas Mandal Gujarat •Action Research in Community Health •ANARDE Foundation •Cohesion Foundation •Development Support Center •DHRUVA •Foundation for Ecological Security •Gramin Vikas Trust Gujarat •Ishwar Gram Vikas Trust •Kutch Seva Trust •Navjeevan •Orpat Charitable Trust •Peoples Training And Research Center •Peoples Welfare Society •Pratham •Rural Development Foundation •Samarth Organisation Trust •Sarjan Foundation •Sarvodaya Parivar Trust •Shree Jay Ashapura Charitable Society •Shree Saraswati Foundation •Shri Aayurved Gramodhyog Mandal •Shri Bolbala Charitable Trust •Shri Siddhi Swaraj Khadi Gramodyog Vikas Mandal •Society for Development & Environment Protection •Society For Integrated Land & Water Management •Sri Dipchn Gopal Sarvojanik Trust •Sristi •Swati Organisation •Tribhuvandas Foundation •Vidyanagar Nature Club
5	Karnataka	•Foundation for Ecological Security
6	Maharashtra	•Marwad Seva Sansthan •Nature Conservation Society of Nashik
7	Madhya Pradesh	•Gramin Vikas Trust •Savigya
8	Orissa	Ekta
9	Rajasthan	•AFPRO •Ambedkar Gramin and Yuva Vikas Sansthan •BAIF - Rajasthan •Foundation for Ecological Security •Gramin Vikas Sansthan •Gramin Vikas Trust •Kshetriya Gramothan Sansthan •Mewar Seva Sansthan •Narayan Seva Sansthan
9	Uttar Pradesh	•Awadh Research Foundation •BAIF - UP
10	Uttarakhand	•BAIF – Uttarakhand

## Ninth Convocation

The Ninth Annual Convocation was held on 19 January 2013. Professor V S Ramamurthy, Director, National Institute of Advanced Studies, Bengaluru, was the Chief Guest. Professor R Natarajan, Member, Board of Governors and former Chairman, All India Council of Technical Education, Government of India, presided over the function. Three hundred and two students received their Degrees and they included 191 BTech (ICT), 38 MTech (ICT), 57 MSc (IT), 13 MSc (ICT-ARD) and 3 PhDs.

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

MTech (ICT) (2010) Anshu Yadav  
 MSc (IT) (2010) Dipika Ramkumar Tiwari  
 BTech (ICT) 2008) Mohit Kothari



Anshu Yadav (MTech-ICT)  
President's Gold Medal



Dipika Tiwari (MSc-IT)  
President's Gold Medal



Mohit Kothari (BTech-ICT)  
President's Gold Medal



BTech 2008 Batch



PG 2010 Batch

Professor Ramamurthy, the Chief Guest, in his convocation address, advised the students to develop their interpersonal communication skills irrespective of the field they chose to work in and make learning a lifelong habit. He opined that fast changing technologies made skills learnt earlier redundant unless a continuous program of skill up-gradation was undertaken and it was a continuing exercise, literally from cradle to grave. He advised the graduates to inculcate the habit of learning all their lives, otherwise, they would lose their competitiveness. He said, "Not only have you to learn new skills on a continuing basis but also to address new real-life problems. Be innovative. Learn to take risks. Accept failures on the way. One who has never failed has never tried."

Professor Ramamurthy left the graduating class a message to be socially conscious.

He said: "The connectivity of the twenty-first century has indeed made everyone on the face of the earth your neighbour. You cannot be happy and prosperous unless your neighbourhood is also happy and prosperous. It is unfortunate that, in the recent years, public good has been somewhat pushed into the background. Many of the ills of today such as social and regional conflicts, terrorism and naxalism can be traced ultimately to conflicts arising out of public good versus private good. Private good at its extreme is simple greed."

Professor Ramamurthy advised students "to emulate the examples of socially conscious corporate leaders across the world and make this world a better place to live for everyone."



## Research 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 journals. The Institute also houses an Incubation Centre to nurture and develop business ideas based on new technology.

The faculty, students, and research staff are active in research in several academic 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 have

been regularly publishing their research work in leading refereed journals and conferences. Over the last decade, many sponsored projects have been initiated by the faculty, including international projects. Many students have started their own companies.

### SPONSORED PROJECTS

In the year 2012-13, the Institute received a grant for one new sponsored project. The project aims to develop a system that will allow doctors to make a quick diagnosis of ailments affecting infants from their recorded cries. Faculty continued work on thirteen ongoing sponsored projects.

Table 1: New Projects

Agency	Title	Duration	Investigators
DSTGOI	Development of Infant Cry Analyzer Using Source And System Features	2012-15 (3 Years)	Hemant Patil





Table 2: Ongoing Projects

Agency	Title	Investigators
Board for Research in Nuclear Sciences (BRNS)	Securing Biometric Data Using Data Hiding Techniques	Mehul Raval
DIT	Development of Cross Lingual Information (CLIA) System Phase-II	Prasenjit Majumder Suman Mitra
DST	Wireless Telemedicine using Body Area Sensor Networks and Heterogeneous Access Networks	Laxminarayana Pillutla
DST	Service-oriented Architecture for spatial Data Integration and Spatial reasoning	Sanjay Chaudhary Minal Bhise
DST	Indian Digital Heritage (IDH-Hampi) Phase-II (Digital Capture of Culture & Heritage)	Manjunath Joshi Hemant Patil
National Innovation Foundation	Value Addition in Grassroots Technologies	Anil Roy Rahul Dubey
BRNS	Techniques for Robust Face Recognition with post variation	Suman Mitra Mehul Raval
DIT	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
DIT	Development of Prosodically Guided Phonetic Engine for searching in Indian Languages	Hemant Patil M.V. Joshi
DST (WOS-A)	Evaluation of spatiotemporal dynamics of land surface evapotranspiration and monsoon rainfall coupling over Indian region for climate change studies	Indrani Choudhury Singh Ranendu Ghosh
ezDI, Ahmedabad Research Centre	Semantic Web Based Parser, SPARQL Query Builder and Information Extraction from Social Networks	Sanjay Chaudhary P.M. Jat Minal Bhise
IEEE Foundation	Water Quality Monitoring	Rahul Dubey
Space Application Centre (ISRO)	Design, Development and Hardware Implementation of BPSK, QPSK and other modulation schemes as part of Software Defined Radio (SDR)/ Cognitive Radio (CR), for use in SATCOM terminals	Vijay Kumar Chakka Rahul Dubey

Faculty completed work on eight sponsored projects. These include three projects with international linkages: ESRC UK-India collaboration, DST

Japan-India collaboration, and DST Spain-India collaboration.

Table 3: Completed Projects

Agency	Title	Investigators
Board for Research in Fusion Technologies (BRFST)	Sensor Network Test-Bed For Tokamak Environment	Prabhat Ranjan Rahul Dubey
DST (Indo-Japan)	Security Proofs And Multidisciplinary Evaluation For Dynamic Key Assignment Schemes	Anish Mathuria Manik Lal Das
DST (Indo-Spain)	Security and Privacy Infrastructure for Internet of Things – Scenarios and Applications	Manik Lal Das Anish Mathuria
DST	Distortion and Accuracy Improvement in Sample and Hold Circuits for Analog-Digital Converters	Subhajit Sen Chetan Parikh Dipankar Nagchoudhuri
Economic and Social Research Council (ESRC)	Integrated Histories of Andaman Islands	Vishvajit Pandya Madhumita Mazumdar
Indo-French Centre for the Promotion of Advanced Research (IFCPAR)	Robust Ultra-Low-Power Double-Gate MOSFET Design of Analog, Digital And SRAM Memory Circuits	Chetan Parikh Dipankar Nagchoudhuri
National Trust	Finger/Wrist mounted Universal Remote Control for CP Patient	Prabhat Ranjan
Physical Research Laboratory (PRL)	Earth Model for Wireless Sensor Nodes for Detection of Water on Moon / Water sensing systems based on Tuned Diode Laser for Planetary Mission	Prabhat Ranjan

## INCUBATION CENTRE

Two student led startups, Areysun Online Pvt. Ltd., and Appbin, were incubated. The companies were invited to come in person for presentation, and were selected based on favorable evaluation by expert committees. The Centre has offered funding to the incubated companies under the TIDE grant received from

DIT. The companies have also been allocated office workspace within the incubator.

## CONSULTANCY PROJECTS

Faculty provided consulting services to one organization in their areas of expertise.

Organization	Consulting Area	Faculty
USID Foundation	Design Challenge - 2012	Asim Banerjee



## Workshops, Special Lectures and Visitors

### SPECIAL LECTURES

**Dr Subhajit Sen**, Faculty, DA-IICT, Gandhinagar, 'The Art and Science of VLSI Chip Design: Bridging the Analog and Digital Worlds', 19 September 2012.

**Shri Arun K Mishra**, Addl. Principal Chief Conservator of Forests, Govt. of Gujarat, 'Nature, Environment and Forest: Conservation and Use of Technology', 4 October 2012.

**Dr Sanjay K Bose**, Faculty, Dept. of EEE at IIT, Guwahati, 'Routing Strategy for Wireless Networks – Unicast and Multicast Transmissions', 29 October 2012.

**Mr Raj Tilak**, Classele (supported by IIT Madras, Chennai), 'NPTEL Awareness Workshop', 25 January 2013.

**Dr D N Reddy**, Chairman, RAC, DRDO, 'Activities at DRDO Laboratories', 22 February 2013.

**Divya Datta**, Director, Innovation at CKS, Centre for Knowledge Societies New Delhi, 'India's Innovation Path', 12 March 2013.

**Prof V Rajaraman**, Indian Institute of Science, Bangalore, 'Co-Operative Cloud Computing', 11 April 2013.

**Dr Shubhalaxmi Kher**, Faculty of Electrical Engineering, Arakansas State University, AR, USA, 'Distributed Dynamic Clustering Algorithm in randomly Deployed Wireless Sensor Network', 30 July 2013.

### SEMINAR

"Using Open Access Resources for Professional Development"; a seminar in association with ADINET (Ahmedabad Library Network); Resource Centre; 16 February 2013 (Keynote speaker: Prof Laxminarayana Pillutla on "Library as a space to nurture inquisitive minds")

### VISITORS

A team of Researchers from NXP Labs, Bangalore visited DA-IICT on 23 January 2013 and the students consulted them for project/thesis work in wireless communication, smart automation, low power RF and networking protocols.

Dr Pablo Najera, Post-Doctoral Fellow, University of Malaga, Spain visited us during March-April 2013 and held consultations with faculty on collaborative Indo-Spain research programs.

A team of consultants of Deloitte Touche Tohmatsu India Private Limited, Mumbai, along with officials of the Royal Government of Bhutan visited DA-IICT on 14 March 2013 and held discussions on the possibility of DA-IICT associating in developing an educational service cluster and centre of learning (Education City) in Bhutan on a Public Private Partnership model.

Other Distinguished Visitors include Prof S S Gokhale, Director of VNIT, Nagpur (11 February 2013); Dr D N Reddy, Chairman, Reruitment Assessment Cell, DRDO, New Delhi (22 February 2013); Mr Keshav V Nori, Executive Vice President, TCS (28 February 2013); Mr Parag Amin of Drexel University, USA (28 March 2013).



## Faculty Publications

Publications reflect faculty and staff interests and their research initiatives. A majority of the publications have student co-authors, indicating a strong faculty commitment to train and mentor both postgraduate and undergraduate students in research. The publications listed here are those that appeared in peer-reviewed journals and conferences.

In 2012-2013, the faculty and staff published 3 books, 8 chapters in books, one Report and 57 papers in journals and conferences.

### Books (Including Edited)

1. **Devy, G. N.** (Eds.), Davis, Geoffrey V. and Chakravarty, K. K. *Narrating Nomadism: Tales of Recovery and Resistance*, India: Routledge, 2013.
  2. **Dubey, Rahul.** *Solace of a Quiet Mind: An Anecdote for the Computer Savvy Generation*, India: Rangdwar Prakashan, 2013.
  3. **Majumder, Prasenjit,** Mitra, Mandar, Bhattacharyya, Pushpak, Subramaniam, L. Venkata, Contractor, Danish, Rosso, Paolo (Eds.). *Multilingual Information Access in South Asian Languages*, Lecture Notes in Computer Science 7536, Springer 2013.
- ### Book Chapters
1. Padiya, Trupti, **Bhise, Minal** and **Chaudhary, Sanjay.** "Semantic web data partitioning," in *Advancing Information Management through Semantic Web Concepts and Ontologies*, Patricia Ordonez de Pablos, Hector Oscar Nigro, Robert Tennyson and Sandra Elizabeth Gonzalez Cisaro Eds. Hershey, PA: Information Science Reference, 2012, pp. 154-165.
  2. Padiya, Trupti, **Bhise, Minal** and **Chaudhary, Sanjay.** "Semantic web data management," in *Advancing Information Management through Semantic Web Concepts and Ontologies*, IGI Global, February 2013, pp. 154-165. ISBN13: 9781466624948.
  3. Bhatt, S, **Chaudhary, Sanjay** and **Bhise, Minal.** "Migration of data between cloud and non-cloud datastore in Migrating Legacy Applications: Challenges," in *Service Oriented Architecture and Cloud Computing Environments*, IGI Global, 2012, pp. 206-225. ISBN13: 9781466624887.
  4. Choudhury, Indrani and **Ghosh, Ranendu.** "Methodology to derive spatiotemporal dynamics of land surface and energy balance parameters using satellite remote sensing," in *Climate Change and Himalayan Ecosystem-indicator*, Bio & Water Resources, J. Sundaresan, Pankaj Gupta, K.M. Santosh and Ram Boojh Eds., Scientific Publishers, India, 2012.
  5. Gajjar, Prakash P., **Joshi, Manjunath** and Upla, Kishor P. "Transform domain based learning for super-resolution restoration," in *Image Restoration: Fundamentals and Advances (Digital Imaging and Computer Vision)*, Bahadir





Kursat Gunturk and Xin Li (Eds.), CRC press, 2012, pp. 175-215.

6. **Pandya, Vishvajit.** "Pain in all the wrong places: The experience of biomedicine among the Ongees of little Andaman island in medical marginality in south Asia: Situating subaltern therapeutics" in Hardiman, D. and Mukherjee, P. Eds., Routledge, London, 2012, pp. 59-84.
7. **Pandya, Vishvajit.** "Being "Primitive" in a Modern World: the Andaman Islanders," in 'Knowing Differently: The Cognitive Challenge of the Indigenous', Devy, G. and Davis, Geoffrey. Eds., Routledge, India, 2012, pp. 13-44.
8. **Parikh, Alka.** "Water scarcity patterns and dilemmas of water distribution," in Dynamics of Cities and Regions, Sudha Srivasta Eds., Sheth Publishers Pvt Ltd., 2013, pp. 63-72.
6. ચૌધરી, સંજય "વર્તમાન શિક્ષણ-પદ્ધતિની હોદ શકે: 'લોકભારતી ગ્રામવિદ્યાપીઠ'," પરબ, ગુજરાતી સાહતિય પરિષદ, જૂન 2013, પૃ. 56-64, ISSN 250-9747.
7. Chahar, Chandrapal, Chauhan, Vishal S., **Das, Manik Lal.** "Code analysis for software and system security using open source tools," Information Security Journal: A Global Perspective, Vol. 21, No. 6, pp. 346-352, 2012.
8. Muraharirao, Siva C., **Das, Manik Lal.** "Digital image protection using keyed hash function," International Journal of Computer Vision and Image Processing (IJCVIP), Vol. 2, No. 2, pp. 36-47, 2012.
9. Makwana, Gautam and **Ghodgaonkar, Deepak.** "Dielectric resonator antenna as a RFID tag for human identification system in wrist watch," International Journal on Smart Sensing and Intelligent Systems, Vol. 6, No. 3, pp. 1133-1166, June 2013.

## Journal Papers

1. Mistry, D., **Banerjee, Asim** and **Tatu, Aditya.** "Image similarity based on intensity using mutual information," International Journal of Computer Science Engineering Research and Development, Vol. 3, No. 3, pp. 1-8, May 2013.
2. Mistry, D. and **Banerjee, Asim.** "Discrete wavelet transform using MATLAB," International Journal of Computer Engineering and Technology, Vol. 4, No. 2, pp. 252-259, 2013.
3. Mistry, D. and **Banerjee, Asim.** "Review: image registration," International Journal of Graphics and Image Processing, Vol. 2, No. 1, pp. 18-22, 2013.
4. ચૌધરી, સંજય "ગીર, તેના પર્યાવરણ અને સમાજજીવનને સમજતી અને આલોખતી નવલકથા - અક્ષર," પરબ, ગુજરાતી સાહતિય પરિષદ, ઓગસ્ટ 2012, પાના નં. 42-53, ISSN 250-9747.
5. Khakhkhar, S., Kumar, V., **Chaudhary, Sanjay.** "Dynamic service composition: A bidirectional approach using forward and backward chaining," The International Journal of Computer Science and Artificial Intelligence (IJCSAI), Vol. 2, No. 3, pp. 32-42, Sept. 2012.
10. Gupta, Aviral Kumar, Dabas, Abhishek and **Ghosh, Ranendu.** "Image classification using textures," Journal of Geomatics (A publication of the Indian Society of Geomatics), Volume 7, No. 1, pg. 77, April 2013.
11. **Kollipara, Bharani.** "Satya P. Mohanty to mukhAmukhi-I: sAhityamIO vAstavikavAdam," Eemata, Vol. XVI, No. 2, March 2013.
12. **Kollipara, Bharani.** "Satya P. Mohanty to mukhAmukhi-II: sAhityamIO Samskrutika Duratisayam," Eemata, Vol. XVI, No. 2, May 2013.
13. Mundra, A., Kumar, N., **Mathuria, Anish** and **Das, M.** "Detecting flaws in dynamic hierarchical key management schemes using specification animation," CSI Journal of Computing, Vol. 1, No. 2, pp. 73-79, 2012.
14. **Mazumdar, Madhumita** and **Pandya, Vishvajit,** "Making sense of the Andaman islanders reflections on a new conjuncture," Economic and Political Weekly, Vol. XLVII, No. 44, November, pp. 51-58, 2012.

15. Bandyopadhyay, Ayan, Ghosh, Kripabandhu, **Majumder, Prasenjit** and Mitra, Mandar. "Query expansion for microblog retrieval," International Journal of Web Science, Vol. 1, No. 4, pp. 368-380, 2012.
16. Shah, Vishal and **Parikh, Alka**. "FDI and Impact on Exports," International Journal of Economics and Business, July-September, 2012.
17. Gupta, Akshya and **Raval, Mehul S.** "A robust and secure watermarking scheme based on singular value replacement," Sadhana, Vol. 37, No. 4, pp. 425-440, Aug. 2012.
18. Vyas, Pavan and **Zaveri, Mazad S.** "Verilog implementation of a node of hierarchical temporal memory," Asian Journal of Computer Science and Information Technology, Vol. 3, No. 7, pp. 103-108, 2013.
6. Dave, V., Bhadauriya, R., Darji, N., **Chaudhary, Sanjay** and Gohil, G. "Labor grid for effective labor migration," in Proceedings of 3rd International Conference on Emerging Applications of Information Technology (EAIT 2012), IN, 30 November-1 December 2012, pp. 227-230.
7. Dabhi, V. K., **Chaudhary, Sanjay**. "Semantic sub-tree crossover operator for postfix genetic programming," in 7th International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2012), Springer, 14 December 2012, pp. 391-402.
8. Kumar, V., Dave, V., Bhadauriya, R., **Chaudhary, Sanjay**. "KrishiMantra: Agricultural Recommendation System," in 3rd ACM Symposium on Computing for Development, Article No. 45. ISBN: 978-1-4503-1856-3, DOI:0.1145/2442882.2442933, 11-12 January 2013.

## Conference and Workshop Papers

1. Mistry, D. and **Banerjee, Asim**. "Image similarity based on joint entropy (Joint Histogram)," in International Conference on Advances in Engineering and Technology (ICAET-2013), May 2013.
2. Padiya, Trupti and **Bhise, Minal**. "Query execution for partitioned RDF data," in ACM International Conference for Women in Engineering, Pune, India, 3-4 February, 2013, pp. 1-8.
3. Vasani, Sandeep, Pandey, Mohit, **Bhise, Minal** and Padiya, Trupti. "Faster query execution for partitioned data," in International Conference on Distributed Computing and Internet Technology ICDCIT 2013, India, 6-8 February, 2013, pp. 547-560.
4. Prakash, Chandra, **Chakka, Vijay Kumar**, Satashia, S. N. and Parikh, K. S. "Digital receiver based Ka band beacon receiver for improved beacon power estimation," in Proceedings of International Conference on Communication and Signal Processing, 3-5 April 2013.
5. Joy, Arun and **Chakka, Vijay Kumar**. "AOFDM based two way relay systems," in Proceedings of AICERA, Kanjirapally, Kerala, IN, June 2013.
9. Bohara, M. H., Mishra, M. and **Chaudhary, Sanjay**. "Restful web service integration using Android platform," in 4th International Conference on Computing Communication and Networking Technologies (ICCCNT), IN, 4-6 July 2013.
10. Aggarwal, Renu and **Das, Manik Lal**. "RFID security in the context of internet of things," in International Conference of Security of Internet of Things (SecurIT 2012), ACM Press, August 2012, pp. 51-56.
11. Agrawal, Sarita, Roman, Rodrigo, **Das, Manik Lal, Mathuria, Anish** and Lopez, Javier. "A novel key update protocol in mobile sensor networks," in International Conference on Information Systems Security (ICISS 2012), LNCS 7671, Springer, December 2012, pp.194-207.
12. Makwana, Gautam and **Ghodgaonkar, Deepak**. "Dielectric resonator antenna as a RFID tag for human identification system in wrist watch," in 6th International Conference on Sensing Technology, Kolkata, India, 18-21 December 2012, pp. 238-242.



13. Choudhury, Indrani and **Ghosh, Ranendu**. "Characterization of precipitation feedback system based on land-surface, meteorological and energy balance parameters," in National Symposium on 'Frontiers of Meteorology with special reference to the Himalaya', Dehradun, IN, 18-22 November 2012.
14. Patel, Rakesh C. and **Joshi, Manjunath**. "Super-resolution of hyper-spectral images using compressive sensing," in ISPRS congress, Melbourne, Australia, August-September 2012.
15. Bhatt, Jignesh, **Joshi, Manjunath** and **Raval, Mehul S**. "A regularization based method for abundance estimation," in SPIE Remote Sensing, Edinburgh, United Kingdom, 24-27 September 2012.
16. Bhatt, Jignesh, **Joshi, Manjunath** and **Raval, Mehul S**. "A MAP-HMRF model for abundance estimation," in SPIE Remote Sensing, Edinburgh, United Kingdom, 24-27 September 2012.
17. Harikumar, **Joshi, Manjunath** and **Raval, Mehul**. "Multiresolution image fusion using compressive sensing and graph cuts," in Proceedings SPIE Remote Sensing, Edinburgh, United Kingdom, 24-27 September 2012.
18. Khatri, Nilay and **Joshi, Manjunath**. "Image super-resolution: Use of self-learning and gabor prior," in Proceedings of Eleventh Asian Conference on Computer Vision (ACCV-12), Daejeon, Korea, 5-9 November 2012.
19. Padalkar, Milind, Zaveri, Mukesh and **Joshi, Manjunath**. "SVD based automatic detection of target regions for image inpainting," in Proceedings of Eleventh Asian Conference on Computer Vision (ACCV-12), Daejeon, Korea, 5-9 November 2012.
20. Turakhia, Naman, Shah, Ruchin and **Joshi, Manjunath**. "Automatic crack detection in heritage site images for image inpainting," in Proceedings of Eighth Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP), Mumbai, 16-19 December 2012.
21. **Joshi, Manjunath V.**, Joshi, Vaibhav and **Raval, Mehul S**. "Multilevel semi-fragile watermarking technique for improving biometric fingerprint system security," in Intelligent Interactive Technologies and Multimedia, IIT Allahabad, IN, Springer, February 2013, pp. 272-283.
22. **Kollipara, Bharani**. "The Ethics of Pain," in IV National Seminar on the Enigma of Pain, Department of Humanities and Social Sciences, Indian Institute of Technology Bombay, Mumbai, IN, 7-9 March 2013.
23. Bandyopadhyay, Ayan, Pal, Sukomal, Mitra, Mandar, **Majumder, Prasenjit** and Ghosh, Kripabandhu. "Passage retrieval for tweet contextualization at INEX 2012," in Conference and Labs of the Evaluation Forum Information Access Evaluation meets Multilinguality, Multimodality, and Visual Analytics (CLEF 2012), Rome, Italy, 17-20 September 2012.
24. Yadav, A. and **Mathuria, Anish**. "Towards formal analysis of key control in group key agreement protocols," in 2nd International Conference on Security, Privacy and Applied Cryptography Engineering (SPACE 2012), Chennai, IN, November 2-3, LNCS, Vol. 7644, 2012, pp. 77-93.
25. Shikkenawis, Gitam and **Mitra, Suman K**. "Improving the locality preserving projection for dimensionality reduction," in Proceedings of EAIT'12, IEEE Explore, December 2012, pp. 161-164.
26. Chaudhary, Mandar, Shikkenawis, Gitam, **Mitra, Suman K**. and Goswami, Mukesh. "Similar looking Gujarati printed character recognition using locality preserving projection and artificial neural networks," in Proceedings of EAIT'12, IEEE Explore, December 2012, pp. 153-156.
27. Munshi, Paridhi and **Mitra, Suman K**. "Reconnecting broken ridges in fingerprints," in Proceedings of EAIT'12, IEEE Explore, December 2012, pp. 275-278.
28. Phophalia, Ashish, **Mitra, Suman K**. and **Rajwade, Ajit**. "A new denoising filter for brain MR images," in Proceedings of ICVGIP'12, ACM Digital Library, December 2012.

29. Mall, Vinod K., Shukla, Shivanshu, **Mitra, Suman K.** and **Roy, Anil K.** "Comprehensive image index and detection of tampering in a digital image," in Proceedings of ICIEV'13, IEEE Explore, May 2013, pp. 1-7.
30. **Mazumdar, Madhumita.** "Dwelling in fluid spaces- the Bengali settlers of the Andaman islands," in Space and Spatiality in South Asia, organized by the British Academy (UK), 7-8 February 2013.
31. **Pandya, Vishvajit.** "In pursuit of the firefly: The poetics and politics of 'lightscape' in the Jarawa forests," in "Space and Spatiality in South Asia, organized by the British Academy (UK), 7-8 February 2013.
32. **Patil, Hemant A.,** Madhavi, Maulik C., Malde, Kewal D. and Vachhani, Bhavikkumar. "Phonetic transcription of fricatives and plosives for Gujarati and Marathi languages," in International Conference on Asian Language Processing (IALP), Hanoi, Vietnam, 13-15 November 2012.
33. **Patil, Hemant A.,** Madhavi, Maulik C. and Chhayani, Nirav H. "Person recognition using humming, singing and speech," in International Conference on Asian Language Processing (IALP), Hanoi, Vietnam, 13-15 November 2012.
34. **Patil, Hemant A.** and Purushottam Radadia. "Combining evidences from Mel cepstral features and cepstral mean subtracted features for singer identification," in International Conference on Asian Language Processing (IALP), Hanoi, Vietnam, 13-15 November 2012.
35. **Raval, Mehul S.** Rege, Priti P. and Parulkar, S. K. "A secure and robust watermarking technique," in IEEE TENCON 2012, Cebu, Philippines, 19-22 November 2012, pp. 1-6.
36. Mall, Vinod K., **Roy, Anil K., Mitra, Suman K.** and Bhatt, Kedar. "Non-blind method detection and localization of structural tampering using robust hash-like function and similarity metric for digital images," in Proceedings of TENCON'12, Cebu, Philippines, 19-22 November 2012, pp. 1-6.
37. Mall, Vinod K., **Roy, Anil K., Mitra, Suman K.** and Shukla, Shivanshu. "Detection of structural tampering in a digital image using Canny Edge Detector," in Proceedings of ICIEV'13, IEEE Explore, May 2013, pp. 1-7.
38. **Sharan, Girja.** "Cooling need of greenhouses in semi-arid hot water scarce Kutch region of north-west India," in Technologies for Sustainable Agricultural Production and Food Security, Sultan Qaboos University, Oman, 24-26 February 2013. pp.170.
39. Ambasana, Nikita and **Zaveri, Mazad S.** "Analysis of increased parallelism in FPGA implementation of neural networks for environment/noise classification and removal," in International Conference on Engineering, Nirma University, Ahmedabad, India, 6-8 December 2012, pp. 1-5.

## Report

1. **Bhatt, Amit.** *Working draft paper on Critique of India's Electronic policy*, IITCOE Centre, Indian Institute of Management, Ahmedabad, October 2012.





## 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 won several awards, received numerous honours and fellowships, and presented a large number of invited talks all over the country, and also abroad. Below is a listing of the major recognitions and activities of the faculty and staff of the Institute.

### AWARDS/HONOURS

#### **Prof Mehul Raval**

Asia Pacific Outstanding Student Branch Counselor Award towards leading IEEE DA-IICT SB by IEEE Region, 10 November, 2012

### HONORARY WORK/POSITIONS HELD ON PROFESSIONAL BODIES

#### **Prof S C Sahasrabudhe**

Member, Review Committee, "Next Generation Networks Systems and Services", Phase I, India-UK Advanced Technology Centre (IU-ATC), IIT Madras

Member, Signal Processing Panel, Naval Research Board, New Delhi

Chairman, Peer Committee, National Board of Accreditation, Delegation visit to College of Engineering Guindy Campus, Anna University, Chennai

Member, Core Committee, Bharti Airtel IITD Center for Excellence in Telecommunication, IIT Delhi

Member, Panel Meeting, "Next Generation Networks Systems and Services", IUATC Project, British High Commission, New Delhi

Member, CERC Board, Consumer Education & Research Centre, Ahmedabad

Member, Board of Governors, Visvesvaraya National Institute of Technology, Nagpur

Director, Sahajanand Laser Technology Limited, Gandhinagar, Gujarat

Member, Recruitment and Assessment Centre (DRDO), New Delhi

Member, NEI Gandhinagar

Member, Board of Governors, Vishwakarma Institute of Information Technology, (VIIT), Pune

Member, Working Group on Technology Development for Indian Languages (TDIL) Programme, DIT, New Delhi

Member, Governing Council, Sardar Patel Institute of Technology, Mumbai

Director-In-Charge, IIIT Vadodara

Member, Finance Committee, IIT Gandhinagar

Member, Executive Council, Central University of Gujarat

#### **Prof Asim Banerjee**

Member of Jury, Diploma Projects of PG students at 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

Member, RPS committee, PhD Students of Computer Science and Engineering Department of SVNIT, Surat

Member, RPS committee, PhD Students of Electronics and Communication Engineering Department of SVNIT, Surat

Examiner, PhD students of Electronics & Communication Engineering Department of SVNIT, Surat



Supervisor, PhD students of Ganpat University,  
Bio-medical Engineering

Senior Member, IEEE

**Prof Vijay Kumar Chakka**

Member, PhD RPS Committee, NIT Surat

Member, PhD RPS Committee, Nirma University

Member, Board of Studies of ECE Department,  
Ganpath University

Member, PhD RPS Committee, GTU

**Prof Sanjay Chaudhary**

Member, Faculty Board, Charotar University of  
Science and Technology, Changa, Gujarat

Member, Faculty of Technology and Engineering,  
Nirma University, Ahmedabad

External Expert, Research Progress Committee  
(RPC), Faculty of Doctoral Studies and Research,  
Nirma University, Ahmedabad

PhD Thesis Examiner, Kadi Sarv Vidyalaya,  
Gandhinagar

**Mr Satish Deshpande**

Member, Working Group on Census, Content  
Creation & Community Information Centres:  
National Mission for Libraries (Ministry of Culture,  
Govt of India)

Executive Committee Member, ADINET  
(Ahmedabad Library Network)

**Prof Ganesh Devy**

Chairperson, People's Linguistic Survey of India,  
Bhasha Research and Publication Centre

**Prof Rahul Dubey**

Member of Board of Studies of Instrumentation  
and Control Engineering (Degree program),  
Nirma University, Ahmedabad, Gujarat

Chair, IEEE Chapter of Industry Applications/  
Industrial Electronics/Power Electronics, Gujarat  
Section, IEEE, Gujarat

**Prof Deepak Ghodgaonkar**

Expert for the Research Week for doctoral &  
PG students, Gujarat Technological University,  
Ahmedabad, 18-25 March, 2013

Chair, IEEE Gujarat Section, India

Fellow, The Institution of Engineers, Malaysia  
(FIEM), Malaysia

Life Fellow, Institution of Electronics and  
Telecommunication Engineers, (FIETE), India

Senior Member, Institute of Electrical and  
Electronics Engineers, (SMIEEE), USA

**Prof Sanjeev Gupta**

Member, Board of Studies (BOS), Charotar  
University of Science and Technology  
(CHARUSAT), Changa, Gujarat

Member, Board of Studies, SATCOM (Satellite  
Communications) Course conducted by Centre  
for Space Science and Technology Education  
in Asia and the Pacific (CSSTEAP – affiliated to  
the United Nations), IIRS Campus, Dehradun  
(Headquarters) & SAC Campus, Ahmedabad

Member, Board of Governoros, Government  
Engineering College, Gandhinagar

Subject Expert to review the academic  
performance of ME in Wireless and Mobile  
Computing of Gujarat Technological University  
(GTU)

Subject Expert, Faculty selection at Charotar  
University of Science and Technology  
(CHARUSAT), Changa, Gujarat

PhD Reviewer, Charotar University of Science  
and Technology (CHARUSAT), Changa, Gujarat

Reviewer, ME Dissertations, Gujarat Technological  
University (GTU), Ahmedabad

PhD Thesis Examiner, Doctoral thesis of SVKM's  
NMIMS, (Narsee Monjee Institute of Management  
Studies), Mumbai

External Expert Member, Selection of faculty  
at Institute of Technology, Nirma University,  
Ahmedabad

External Expert Member, Selection of faculty,  
Gujarat Technological University (GTU),  
Ahmedabad

Doctoral Progress Review Committee (DOC)  
Member, PhD student of Gujarat Technological  
University (GTU), Ahmedabad



Expert Member of Research Progress Committee (RPC), Faculty of Doctoral Studies and Research, Nirma University, Ahmedabad

Member of Advisory Committee, Gujarat Technological University (GTU) for the establishment of Centre for Mobile Computing and Wireless Technologies

Coordinator for cooperation with SAC under the MoU for cooperation in research and academic activities, Space Applications Centre (ISRO, Department of Space, Govt. of India), Ahmedabad

Member, Antenna Test and Measurement Association (ATMA)

Member, Agilent's Test Advisory Panel

#### **Prof M V Joshi**

Member, IEEE

Member, ISTE

Member, IETE

#### **Prof Anish Mathuria**

Expert Reviewer, Development Innovation Ventures, US Agency for International Development (USAID), 2012

#### **Prof Suman Mitra**

Member, Academic Committee, Indian Institute of Information Technology (IIIT), Vadodara, Vadodara, Gujarat, 2013-14

Member, Departmental Academic Committee, Department of Electronics and Communication, Sardar Vallabhbhai National Institute (SVNIT), Surat, Gujarat, 2012-13

Member, Departmental Academic Committee, Department of Information Technology, Dharmsinh Desai University, Nandiad, Gujarat, 2012-13

Chair, IEEE Gujarat Section, India

#### **Prof Vishvajit Pandya**

Member and Research Advisor on Tribal affairs. Andaman and Nicobar Administration

(Hon.) Director, Andaman and Nicobar Tribal Research Institute (ANTRI)

Member, Tribal Welfare Policy Research, National Advisory Council New Delhi and Planning

Commission New Delhi, on the position of 'Particularly Vulnerable Tribal Groups' (PVTGs) India

#### **Prof Radha Parikh**

Member, Rabbani Educational Trust, Gwalior, Madhya Pradesh, 2012-13

#### **Prof Mehul Raval**

Member, Board of studies in Computer Engineering, R K University, Rajkot, Gujarat

Vice Chair, IEEE Gujarat Section

Secretary, IEEE Gujarat Section

Member, IT- T working group on Innovation, ITU (International Telecommunication Union), Geneva, January 2012

Elected as IEEE Senior member for Contribution towards the IEEE and Technical Domain, IEEE, April 2013

Advisor, Telecommunication Sector Skill development Council (TSSC), New Delhi, June 2013

#### **Prof Girja Sharan**

Member, Indian Council of Agricultural Research, 2013-16

Member, Research Advisory Committee of Central Arid Zone Research Institute (CAZRI), Jodhpur

Member, Research Advisory Committee of Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad

Designed and installed a community solar cooker unit at SEWA office Ganeshpura, Mahesana, February 2013

#### **Prof V Sunitha**

Member, Board of Studies (Mathematics), Pandit Deendayal Petroleum University Gandhinagar, Gujarat, India, 2012

Member, Academy of Discrete Mathematics and Applications, Mysore, Karnataka, India, 2012

#### **Prof Mazad Zaveri**

Member, Executive Committee, Network of Engineering Institutions, Gandhinagar, Gujarat

## FELLOWSHIPS/VISITING SCHOLAR

### Prof V Sunitha

IMSc Associateship, Theoretical Computer Science, Institute of Mathematical Sciences, Taramani, Chennai, Tamil Nadu, India, 2012

## JOURNAL EDITORSHIP

### Prof Manish Gupta

Guest Associate Editor, IEEE Journal on Selected Areas in Communications, Special Issue on Emerging Technologies in Communications (Nanoscale and Molecular Networking), 2013

### Prof Sanjeev Gupta

Editorial Board Member, International Journal on Science and Technology

### Prof Suman Mitra

Associate Editor, International Journal of Image and Graphics, World Scientific, 2012-13

### Prof Radha Parikh

Editorial Board Member, Transformative Learning and Online Education: Aesthetics, Dimensions and Concepts, Hershey, PA: IGI Global, 2013

### Prof Hemant Patil

Guest Editor, International Journal of Speech Technology: Special issue on Speaker Recognition, Springer, ISSN: 1381-2416

Editorial Board Member, Engineering Letters, International Association of Engineers

## REVIEWING

### Book Chapters

#### Prof Sanjeev Gupta

Review of the manuscript, four chapters, 'Communication Systems', Tata McGraw-Hill Publishing Company Ltd.

### Journal Paper Reviewing

#### Prof Vijay Kumar Chakka

IEEE Vehicular Technology, *IEEE*

IEEE Communications, *IEEE*

Circuits, Systems and Signal Processing, *Springer*

#### Prof Sanjay Chaudhary

Future Generation Computer Systems, *Elsevier*

The Journal of Internet Services and Applications, *Springer*

#### Prof Manik Lal Das

IEEE Transactions on Wireless Communications, *IEEE*

IET Information Security, *IEEE*

IEEE Sensors Journal, *IEEE*

Security and Communication Networks, *Wiley*

#### Prof Deepak Ghodgaonkar

IEEE Transactions on Instrumentation and Measurement (IM), *IEEE*

IEEE Transactions on Microwave Theory and Techniques (MTT), *IEEE*

#### Prof Ranendu Ghosh

Journal of Geomatics, *Indian Society of Geomatics*

#### Prof Sanjeev Gupta

Journal of Electromagnetic Waves and Applications (JEMWA), *Taylor & Francis*

Progress in Electromagnetic Research (PIER), USA, *PIER*

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, *Indian Institute of Science*

Iranian Journal of Electrical and Computer Engineering (IJECE), *IJECE*

International Journal on Science and Technology, ISSN: 2229-7677, *Bharath University*

ICTACT Journal of Communication Technology (IJCT), *ICTACT*

#### Prof M V Joshi

IEEE Transactions on Geoscience and Remote Sensing, *IEEE*



IEEE Transactions on Image Processing, *IEEE*

**Prof Prasenjit Majumder**

ACM Transactions on Information Systems, *ACM*

**Prof Radha Parikh**

Constructing Online Culture through Information Communication Technologies, *IGI Global*

**Prof Hemant Patil**

International Journal of Speech Technology, *IJST, Springer Verlag, USA*

Circuits, Systems & Signal Processing, *Springer-Verlag*

Signal Processing, *Elsevier*

**Prof Laxminarayana Pillutla**

IEEE Communication Letters, *IEEE*

International Journal of Computer Mathematics, *Taylor and Francis*

**Prof Mehul Raval**

Transactions on Geo-science and Remote Sensing, *IEEE*

**Prof Girja Sharan**

Atmospheric Research, *Elsevier*

International Journal of Engineering Service Learning, *IJSLE*

## Conference-Paper Reviewing

**Prof Asim Banerjee**

International Conference on Current Trends in Technology (NUICONE) 2012, December 2012

National Conference on Communication (NCC), 2013, 15-17 February 2013

National Conference on Emerging Trends and Applications in Computer Science (NCETACS-2013) – NCCIT, February 2013

3rd IEEE International Advance Computing Conference (IACC-2013), 22-23 February 2013

One Day Pre-ICSE Workshop on Software Engineering - WOSE 2013 Program Co-chair, 27 July 2013

Machine Intelligence Research and Advancement (MIRA2013) International Conference: Paper Review, July 2013

**Prof Vijay Kumar Chakka**

NUICONE 2012, Nirma University, Ahmedabad, 6-8 December 2012

**Prof Sanjay Chaudhary**

Second World Congress on Information and Communication Technologies (WICT 2012), Trivendrum, India, 30 October-2 November 2012

3rd International Conference on Services n Emerging Markets (SRII-India ICSEM 2012), Mysore, India, 12-15 December 2012

10th IEEE International Conference on Service Computing, , Santa Clara Marriott, CA, USA, 27 June-2 July 2013

Program Chair, One-day Pre-ICSE workshop on Software Engineering, Ahmedabad, India, 27 July 2013

**Prof Manik Lal Das**

International Conference on Distributed Computing and Internet Technologies (ICDCIT), 5-8 February 2013

International Conference on Intelligent Systems and Signal Processing (ISSP 2013), 1-2 March 2013

**Prof Rahul Dubey**

NUICONE 2012, Nirma University, Ahmedabad, 6-8 December 2012

**Prof Deepak Ghodgaonkar**

3rd Nirma University Conference on Engineering (NUICONE 2012), Nirma University, Ahmedabad, 6-8 December 2012

1st International Conference on Emerging Technology Trends in Electronics, Communication and Networking (ET2ECN-2012), SVNIT, Surat, 19-21 December 2012

**Prof M V Joshi**

The Eighth Indian Conference on Vision, Graphics and Image Processing (ICVGIP), Mumbai, 16-19 December 2012

National Conference on Computer Vision, Pattern Recognition, Image Processing and Graphics (NCVPRIPG 2013), Jodhpur, India, 18-21 December 2013

#### **Prof Prasenjit Majumder**

35th Annual International ACM SIGIR Conference on Research & Development on Information Retrieval, Portland, Oregon, USA, 12-16 August 2012

Conference and Labs of the Evaluation Forum Information Access Evaluation meets Multilinguality, Multimodality, and Visual Analytics (CLEF 2012), Rome, Italy, 17-20 September 2012

Forum for Information Retrieval Evaluation (FIRE), Indian Statistical Institute, Kolkata, 17-19 December 2012

#### **Prof Alka Parikh**

"Mumbai Fort: Fountainhead of Development" an International Seminar, Sophia College, in collaboration with the Sophia Centre for Women's Studies and Development, 11-12 January 2013

National Seminar on Sustainable Development: Indo-Canadian Perspective, Department of Economics, SNDT University and UGC Area Studies Centre for Canadian Studies, Mumbai, 19-20 March 2013

#### **Prof Hemant Patil**

38th International Conference Acoustics Speech and Signal Processing, ICASSP'13, Vancouver, Canada, 26-31 May 2013

14th Annual Conference of International Speech Communication Association, INTERSPEECH 2013, Lyon, France, 25-29 August 2013

#### **Prof Laxminarayana Pillutla**

National Conference on Communications (NCC), February 2013

#### **Prof Mehul Raval**

World Congress on ICT, Trivandrum, 30 October-2 November 2012

International Conference on Computer and Communication Technology, MNNIT, Allahabad, 23-25 November 2012

NUiCONE 2012, Nirma University, Ahmedabad, 6-8 December 2012

Bio Inspired Computing: Theories and Application, 2012 (BICTA 2012), ABV IIT Gwalior, 14-16 December 2012

Soft Computing for Problem Solving, 2012 (SoCProS-2012), J. K. Lakshmi Pat University, Jaipur, 28-30 December 2012

IEEE Symposium on Computers & Informatics, Langkawi, Malaysia, 7-9 April 2013

#### **Prof Girja Sharan**

International Conference of Agricultural Engineering, Sulat Qaboos University, Oman

#### **Prof Mazad Zaveri**

Program Committee Member, International Conference on Advances in Computing, Control and Communication, Fr. Conceicao Rodrigues College of Engineering, Mumbai, 18-19 January 2013

### **INVITED LECTURES/TALKS/COURSES**

#### **Prof S C Sahasrabudhe**

"Next Generation Networks," Devi Ahilya University, Indore

#### **Prof Asim Banerjee**

"Software Quality Assurance and Software Project Estimation," as a part of a program for Industry Professionals, Ahmedabad, 12 December 2012

"Software Scope Management and Software Risk Management," as a part of a program for Industry Professionals, Ahmedabad, 13 December 2012

"Research Methodology," Faculty & PG students of Ganpat University, 6 April 2013

"Research Methodology," PG students of Parul Institute of Technology, 4 May 2013

"Medical Image Processing," Faculty & PG students of Indus Institute of Technology, Ahmedabad, 11 May 2013

#### **Prof Amit Bhatt**

"VLSI Education in India," Cadence CDNLive, Bangalore, India, 10 October 2012

**Prof Vijay Kumar Chakka**

“Advances in wireless communication,” Marwadi Engineering College, Rajkot, May 2013

**Prof Sanjay Chaudhary**

Tutorial on “Cross Enterprise Collaboration,” 3rd International Conference on Services in Emerging Markets, Infosys Campus, Mysore, India. 2-15 December 2012

“ICT in Agriculture and Rural Development,” at Lokbharati GramVidypeeth, Sanosara, Bhavnagar, Gujarat, India, 23 December 2012

“Cloud Computing,” Academic Staff College, Sardar Patel University, V V Nagar, 1 March 2013

“Data Mining and Knowledge Extraction,” Information Technology in Agriculture and Food, a Strategy Formulation Meeting (SFM), Information Technology Research Academy (ITRA), Media Labs Asia, New Delhi, 15-16 March 2013

**Prof Manik Lal Das**

Expert Talk on “Security and privacy issues of “Internet of Things” Applications,” National Institute of Technology, Surat, India, 24 November 2012

**Prof Rahul Dubey**

Interactive session, “Cultivating observation skills in the young generation,” DPS Bopal, 20 June 2013

**Prof Deepak Ghodgaonkar**

“Microwave Nondestructive Testing of Composite Materials,” 1st International Conference on Emerging Technology Trends in Electronics, Communication and Networking (ET2ECN-2012), SVNIT, Surat, 19 December 2012

“Latest Developments in Communication Technology & Safeguarding Marine Borders: Satellite Communications,” Gujarat National Law University (GNLU), Gandhinagar, Gujarat, 2 April 2013

Expert Lecture on “Satellite Communications, STTP on ‘Wireless and Optical Communications’,” SVNIT, Surat, Gujarat, 24-28 June 2013

**Prof Sanjeev Gupta**

“Issues in Wireless Communication System Design,” One Day Workshop on RF, Microwave and Wireless Communication, Gujarat Technological University, GTU (Old Campus), Gandhinagar, 6 October 2012

“Integrated Active Antennas - Challenges and Design Issues,” ISTE approved One Week Short Term Training Programme (STTP) on Design, Testing, Performance Evaluation of Microwave Antennas, Vishwarkarma Institute of Information Technology (VIIT), Pune, 20 December 2012

“Communication Engineering,” Personality Development and Technical Skill Enhancement Program, Sabar Institute of Technology for Girls, Gandhinagar, 4 January 2013

“Issues and Challenges in Wireless System Design,” EC Department, Institute of Technology, Nirma University, 11 January 2013

“Issues and Challenges in Wireless System Design,” International Conference on Mobile and Embedded Technology (MECON-2013), Amity School of Engineering and Technology (ASET), Amity University Campus, Noida, 17-18 January 2013

“Issues and Challenges in Wireless System Design,” EC Department, Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 11 February 2013

“Microstrip Antennas,” EC Department, Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 9 March 2013

“Integrated Active Antennas-Challenges and Design Issues,” Short Term Training Programme (STTP) on Advances in Antennas and RFIC / MMIC Design, K. J. Somaiya College of Engineering (KJSCE), Vidyavihar, Mumbai, 28 June 2013

“Challenges in RF Design,” ISTE approved Two Week Short Term Faculty Training Programme on Advances in Electronics and Communication Engineering, Institute of Technology, Nirma University, Ahmedabad, 8 July 2013

**Prof Pokhar M Jat**

“Consumer Linked Data,” National Workshop on Advances in Open Source Mobile Technologies (SABAR-AOSMT-2013), Sabar Institute of Technology for Girls, Sabarkantha, Gujarat, 12 April 2013

**Prof M V Joshi**

“International Workshop on Computer Vision and Machine Learning (IWCVML-2012),” Dept of Mathematics and Comp Science, Sri Sathya Sai Institute of Higher Learning, Prasanthinilayam-515134, Vidyagiri, Anantapur District, AP State, 20-23 December 2012

Guest lecture on “Image Processing and Computer Vision: Fundamentals and Possible Research Areas,” Reva Institute of Technology and Management Yelahanka, Bengaluru, 28 December 2012

Guest lectures on “Digital Signal Processing,” Department of Electronics & Telecommunication Engineering, Yeshwantrao Chavan College of Engineering, Nagpur, 28-2 March 2013

“Trends and Developments in Signal Processing and its applications”, Department of Electronics & Communication Engineering. Amrita School of Engineering, Bangalore, 27-28 April 2013

**Prof Bharani Kollipara**

Paper Presentation, “The Ethics of Pain,” IV National Seminar of the Balvant Parekh Centre for General Semantics, 6-8 March 2013

**Prof Majumder, Prasenjit**

“New Directions in FIR,” Conference and Labs of the Evaluation Forum; Information Access Evaluation meets Multilinguality, Multimodality, and Visual Analytics (CLEF 2012), Rome, Italy, 17-20 September 2012

**Prof Anish Mathuria**

“Modeling key control attacks on group key exchange,” 12th National Workshop on Cryptology, VIT, Vellore, 7 August 2012

“Preventing malleability attacks by malicious insiders in group key exchange protocols,”

5th International Conference on Security of Information and Networks (SIN 2012), Jaipur, 27 October 2012

**Prof Jaideep Mulherkar**

“Entropy rate calculations using algebraic measures,” International conference on Operator Algebras and Statistical Mechanics, Goa, India, 16-22 December 2012

**Prof Vishvajit Pandya**

Key Note address on “Our relations with Mr. Portman: Tribal Policy and the Resistance to history in the Andaman Islands,” Conference on Manifestations of History in the Andaman Islands. Institut fur Ethnologie, Ludwig Maximilians Universitaat, Munich, Germany, 21 June 2012

Paper on “Playing with the state in the forest: Jarawa children’s changing world,” in the International Union of Anthropological and Ethnological Sciences Congress on Children and Youth in a changing World. Bhubaneswar, India, 26 November 2012

Talk on ‘IN TERRA NULLIUS - The legacies of science and colonialism in the Andaman Islands,’ in the “Science, Society and Nature”, Public Lecture Series, Nehru Memorial Museum and Library, Teen Murti, New Delhi, 22 May 2013

**Prof Alka Parikh**

“Significance and use of quantitative and qualitative methods in social science research,” Masters in Gender, Culture and Development Studies, Women’s Study Center, University of Pune, India, 6-17 August 2012

**Prof Radha Parikh**

“Communication skills,” Workshop on Communication skills for Faculty at Amrita University, Kollam, 12-14 July 2013

**Prof Hemant Patil**

“Review of Digital Signal Processing,” R. K. University, Rajkot, Gujarat, India, 15 September 2012

“DSP Everywhere,” B. H. Gardi College of Engineering and Technology, Rajkot, India, 13 April 2013



“Speech Processing and its Applications,” Instrumentation, Control and Signal Processing (ICSP-2013), SGGE&T, Nanded, Maharashtra, India, 8-9 July 2013

Invited to deliver a keynote address on ‘Instrumentation, Control and Signal Processing (ICSP-2013)’, SGGE&T, Nanded, Maharashtra, India, 8-9 July 2013

#### **Prof Laxminarayana Pillutla**

“Indoor Target Tracking using Wireless Sensor Networks, ” Group Monitoring Workshop organized by Department of Science and Technology (DST), Bangalore, 26 April 2013

#### **Prof Mehul Raval**

“Neurofuzzy applications in Image Processin,” Short Term Training Programme

“Introduction to Image Processing,” Refresher Course for Engineers, UGC Staff College, Anand, 22 February 2013

“Neuro fuzzy applications,” IEEE Gujarat Section Softcomputing Workshop, Sarvajani Collge of Engineering and Technology, Surat, Gujarat, 15 March 2013

“Recent Trends in Computational Intelligence,” A. D. Patel Institute of Technology, Anand, 4 July 2013

#### **Prof Girja Sharan**

“Systems Modeling and Simulation,” Adani Institute of Infrastructure Management, Ahmedabad, India, December 2012-January 2013

#### **Prof V Sunitha**

“Interconnection Networks in High Performance Computing: A Graph Theoretic Perspective,” Alan Turing Centenary Year Celebrations – Workshop on Art of Computing Department of Applied Mathematics and Computational Sciences at PSG College of Technology, Coimbatore, Tamil Nadu, India, 7-8 December, 2012

“Applications of Network Flows,” Golden Jubilee Thematic Lectures in Theoretical Computer Science at Institute of Mathematical Sciences, Chennai, Tamil Nadu, India, 22 December 2012

“Graph Theory for Algorithms,” TCS Visiting Student Programme 2013, Institute of Mathematical Sciences, Chennai, Tamil Nadu, India, May-July 2013

#### **Prof Aditya Tatu**

“Introduction to Shape Analysis,” The LNM Institute of Information Technology, Jaipur, India, 18 January 2013

### **CONFERENCE/WORKSHOP SESSION CHAIR**

#### **Prof Asim Banerjee**

Program Co-Chair, One Day Pre-ICSE Workshop on Software Engineering, Ahmedabad, 27 July 2013

#### **Prof Prasenjit Majumder**

Chair, MSR India & IRSI Pre-FIRE Workshop on Multilingual Information Retrieval, Microsoft Research Bangalore, 14-17 June 2013

#### **Prof Anish Mathuria**

Invited Expert, Curriculum Workshop, 25th January, Dept. of Computer Engineering, Malaviya National Institute of Technology Jaipur, 2013

#### **Prof Madhumita Mazumdar**

Discussant, “Manifestations of History in the Andaman Islands”, Institut fur Ethnologie, Ludwig Maximilians Universitaat, Munich, Germany, 21-23 June 2013

#### **Prof Alka Parikh**

Session Chair, National Seminar on Sustainable Development: Indo-Canadian Perspective, Department of Economics, SNDT university and UGC Area Studies Centre for Canadian Studies, Mumbai, 19-20 March 2013

#### **Prof Radha Parikh**

Session Chair, ‘Changing trends of Indian Writing in English in the last century’, in the seminar on Comparative literature at Central University of Tamil Nadu, Thiruvarur, 22-23 March 2013

#### **Prof Mehul Raval**

IEEE Emerging Technology trends in Electronics. Communication and Networking, Image

Processing, IEEE Gujarat Section and SVNIT Surat, 19-21 December 2012

## CONFERENCE PROGRAM COMMITTEE

### Prof Asim Banerjee

Member, International Conference on Current Trends in Technology (NUICONE) 2012, Nirma University, India, 8-10 December 2012

### Prof Vijay Kumar Chakka

Member, 3rd International Conference on Computer and Communication Technology, ICCCT-2012, M.N.N.I.T., Allahabad, U.P., India, 23-25 November 2012

Member, First International Conference on Advance Computing and Communication, ICACC-2013, Ranchi, India, 16-17 March 2013

### Prof Deepak Ghodgaonkar

General Chair – National Seminar on Computer Vision and Image Processing (NaSCoVIP 2012), Marwadi Education Foundation's Group of Institutions, Rajkot, Gujarat, 21-22 September 2012

Conference Co-Chair, 3rd Nirma University Conference on Engineering (NUICONE 2012), Nirma University, Ahmedabad, 6-8 December 2012

Technical Program Chair, 1st International Conference on Emerging Technology Trends in Electronics, Communication and Networking (ET2ECN-2012), SVNIT, Surat, 9-21 December 2012

Member, National Advisory Committee, International Conference and Workshop on Emerging Trends in Technology 2013 (ICWET 2013), Thakur College of Engineering & Technology, Mumbai, 22-23 February 2013

Conference Co-Chair, International Conference on Intelligent Systems and Signal Processing (ISSP), G H Patel College of Engineering & Technology, Vallabh Vidyanagar, Gujarat, 1-2 March 2013

### Prof Sanjeev Gupta

National Advisory Committee Member, National Conference on Innovation and Emerging

Technologies (NCIET-2013), Smt. S.R. Patel College of Engineering (SRPEC), GTU, District Mehsana, Gujarat, 8-9 January 2013

### Prof Pokhar M Jat

“Pre-ICSE” Workshop on Software Engineering, ICSE-2014 for Computer Society of India - Region-3., Ahmedabad, 27 July 2013

### Prof M V Joshi

Member, The Eighth Indian Conference on Vision, Graphics and Image Processing (ICVGIP), Mumbai, 16-19 December 2012

### Prof Prasenjit Majumder

Chair, 35th Annual International ACM SIGIR Conference on Research & Development on Information Retrieval, Portland, Oregon, USA, 12-16 August 2012

Chair, Conference and Labs of the Evaluation Forum Information Access Evaluation meets Multilinguality, Multimodality, and Visual Analytics (CLEF 2012), Rome, Italy, 17-20 September 2012

Chair, Forum for Information Retrieval Evaluation (FIRE), Indian Statistical Institute, Kolkata, 17-19 December 2012

### Prof Anish Mathuria

Member, 12th National Workshop on Cryptology, VIT, Vellore, 6-8 August 2012

Steering Committee Member, 8th International Conference on Information System Security (ICISS), Guwahati, 15-19 December 2012

### Prof Hemant Patil

Member, Image and Speech Processing (WISP), IIIT Hyderabad, India, 17 December 2012

Member, Winter School on Speech and Audio Processing (WiSSAP-2013), Theme: Statistical Parametric Speech Synthesis, IIT Madras, 22-25 February 2013

### Prof Girja Sharan

Member, International Scientific Committee of Technologies for Sustainable Agricultural Production and Food Security



## VISIT TO INSTITUTES/ INDUSTRIES

### **Prof Minal Bhise**

Technical Review for Project: Service-Oriented Architecture for Spatial Data Integration and Spatial Reasoning, Department of Science and Technology, Govt. of India, New Delhi

Member of PhD RPS Committee, Computer Science Department, Nirma University

### **Prof Sanjay Chaudhary**

Consumer Education and Research Center, Ahmedabad for Preparation of ICT budget for Centre of Excellence, Jan-Feb 2013

### **Prof Sanjeev Gupta**

Adjunct Faculty, IIT Gandhinagar (to teach EE 305\_EM Waves Course BTech 3rd year – 5th Semester Electrical Engineering students and EE 401\_Communication Lab Course to BTech 4th year -7th Semester Electrical Engineering students), August to November 2012 (Autumn Semester 2012-13)

Subject Expert for faculty selection at Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 9 December 2012

PhD Reviewer for five PhD Candidates at Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 12 December 2012

6th Faculty Board of Studies (BOS) Meeting at Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 29 December 2012

Reviewer of ME Dissertations (Phase-I), Gujarat Technological University (GTU), Ahmedabad, 20 February 2013 and 28 February 2013

7th Faculty Board of Studies (BOS) Meeting at Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 9 March 2013

External Examiner for MTech Theses, Gujarat Technological University (GTU), Ahmedabad, 25 March 2013 and 28 March 2013

External Expert for selection of faculty, Gujarat Technological University (GTU), Ahmedabad, 8 April 2013

PhD Reviewer for three PhD candidates at Charotar University of Science and Technology (CHARUSAT), Changa, Gujarat, 3 May 2013

Subject Expert for selection of faculty at Institute of Technology, Nirma University, Ahmedabad, 20 June 2013

### **Prof M V Joshi**

Visiting Team Member, National Board of Accreditation India

### **Prof Hemant Patil**

IDH-Hampi DST Project meeting, IIT Bombay, 29 September 2012

DietY Prosody Project Meeting at IIIT Hyderabad, 25-28 October 2012

DietY TTS workshop on HMM-Based Speech Synthesis Tool at SSN College of Engineering, Chennai, 26-29 November 2012

DietY Prosody Project Meeting on Phonic Engine at IIT Hyderabad, 18 December 2012

PRSG meeting on 5 February 2013 to report the progress of DietY sponsored project Project Code: 12/DITGOI/HAP/DTSSIL2

PRSG meeting on 5 February 2013 to report the progress of DietY sponsored project Project Code: 11/DITGOI/HAP/DPGP

DietY Workshop on Phonetic Engine Project 9-10 March 2013 at Thapar University, Patiala to report the progress of DietY sponsored project. Project Code: 11/DITGOI/HAP/DPGPE

R&D meeting during 14-15 June 2013 at IIT Mandi to report the progress of DietY sponsored project. Project Code: 12/DITGOI/HAP/DTSSIL2

### **Prof V Sunitha**

Visited Institute of Mathematical Sciences, Chennai for Graph automorphisms and labeling for Interconnection Networks with Prof. Sanming Zhou (University of Melbourne, Australia), December 2012

Institute of Mathematical Sciences, Chennai for counting spanning binary trees with Prof C R Subramanian, IMSc, Chennai, India, May-July 2013

## SPONSORED RESEARCH PROJECTS

### Prof Asim Banerjee

Establishing a Center of Excellence in the area of Mobile Application Development, Sponsored by USID, Hyderabad.

### Prof Ranendu Ghosh

Project Initiated with Space Applications Center (ISRO), Ahmedabad on Renewable energy resources assessment and monitoring through synthesis of multi-source spatial data

### Prof M V Joshi

Conducted CEP on “Super-resolution for remotely sensed satellite images” for ISRO Ahmedabad, scientists, August 2012

### Prof Girja Sharan

Arid area greenhouse cropping trials, Kothara, Kutch Sponsored by Sustainable Technology Centre

Dew harvesting Technology, Kothara, Kutch Sponsored by Sustainable Technology Centre

## CONSULTANCY WORK

### Mr Satish Deshpande

Chief Design Consultant & Advisor, Library & Info Centre for Sachivalaya Staff at Information Commissioner’s Office, Govt of Gujarat, Gandhinagar

### Prof Ranendu Ghosh

National Level Monitor, Ministry of Rural Development, Govt. of India, May 2013

### Prof Alka Parikh

Brief Assessment: Natural Disaster Management, Role & Importance of Integrated Solutions in Risk Coping against Future Calamities, GIZ, India, 1 August 2012 – 30 September 2012





## Faculty and Staff Updates

### FACULTY

The faculty consisted of 51 regular faculty members and 3 visiting faculty on full time basis besides 22 adjunct faculty members who taught specialized courses in all Programs. The list of faculty members is available at **Annexure 3**.

### New Faculty

The following faculty have joined the Institute during the year 2012-13:

1. Biswajit Mishra as Associate Professor on 18 March 2013
2. Puneet Bhateja joined as Assistant Professor on 24 July 2013
3. Maitreyee Mukherji joined as Visiting Faculty on 29 July 2013

### Faculty Resignations

1. Prabhat Ranjan, Professor (wef 23 April 2013)
2. Ajit Rajwade, Assistant Professor (wef 31 May 2013)
3. Subhajit Sen, Associate Professor (wef 31 May 2013)
4. Mehul Raval, Assistant Professor (wef 1 July 2013)
5. Sanjay Chaudhary, Professor (wef 1 July 2013)

### STAFF

#### New Staff

During the reporting period, five staff members have joined the Institute: A list of staff is given in **Annexure 4**

1. Keshurbhai Zala joined as General Assistant on 1 August 2012
2. Shashikumar A A joined as Jr. Professional Assistant on 30 October 2012
3. Soman Nair joined as Executive Registrar on 29 November 2012
4. Dinesh Prajapati joined as Senior Programmer on 28 December 2012
5. Bahadursinh Vaghela joined as Driver on 1 February 2013

#### Staff Resignations

1. B Sreekumar, Deputy Registrar (Academic) (wef 31 October 2012)
2. Manoj Nair, Library Assistant (wef 28 December 2012)
3. Rashmil Mishra, Placement Coordinator (wef 31 March 2013)
4. T S Kumbar, Chief Librarian (wef 11 April 2013)





Director's Interview – Seasonal Magazine (Seasonal Magazine, Vol. 1, Issue 12, October 2012)



DA-ICT's students (Saksham Gupta and Brijesh Patel) won Myron Zucker Travel Award (sponsored by Industry Application Society of IEEE) (DNA, Ahmedabad; 3 June 2013)

# Now, a low-cost gadget to check water pollution

DAI ICT team designs prototype of real-time water quality monitor



Prof. Rahul Dubey's guidance in preparing low-cost gadget to check water pollution (Ahmedabad Mirror; 21 May 2013)



22 Students from DA-IICT selected for Google Summer of Code 2013 (GSoC) internship (Ahmedabad Mirror; 2 June 2013)

# Google internship 22 students from DA-IICT

The students will write code for various open-source software projects. They are from DA-IICT, followed by Nirma, U V Engineering and L I I



Prof. Girija Sharan's work on collecting water through condensation in coastal areas acclaimed (Eastern Chronicle Kolkata, June 2013)

# TCS gold medal

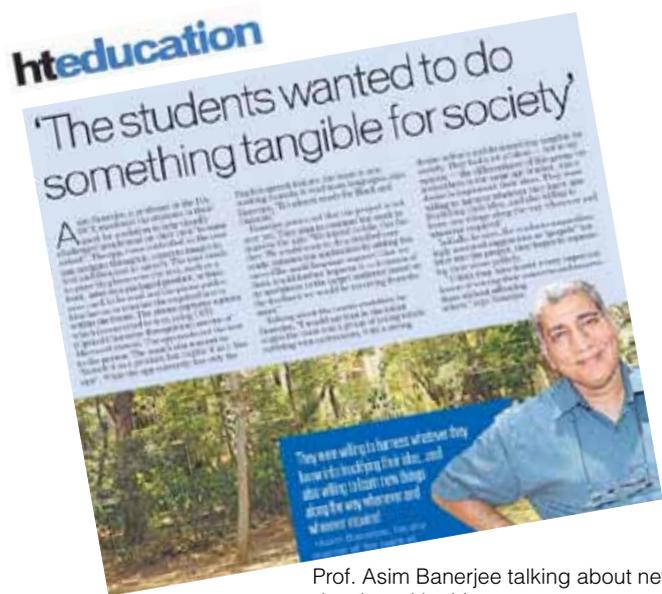
batchmates to win 2012-13 Best Student award



Raghuvir Songhela

from Bharati School of Telecommunication, IIT Delhi for his research work in 2012. An all rounder, Raghuvir won the SRAG Lawn-Tennis Open Doubles Tournament in December 2012. He has won several prizes in street-plays and stage plays. He is also serving as a Teaching Assistant (TA) at DAI ICT. Another student from DAI ICT, Poojan Shah, a student from 2011-12 BTech batch was awarded the gold medal in his batch. Shah is currently pursuing Masters in Science in Embedded Systems. To win this award, a student has to excel in academics and show active participation in institute level activities. He has to be a member of technical forums and win other awards. He is marked on general conduct, leadership, coordination and participation in societal as well as organizational activities.

BTech students of DA-IICT (Raghuvir Songhela and Poojan Shah) won the Gold Medal in the 'TCS 100 Best' competition (Ahmedabad Mirror; 3 March 2013; City



Prof. Asim Banerjee talking about new innovative app developed by his team (Hindustan Times, New Delhi; 22 May 2013)



## Student Activities and Achievements

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

### Synapse-2013

Synapse, the Annual Techno-Cultural Festival of DA-IICT, was organized on 28 February 2013 to 3 March 2013. Synapse-2013 proved to be the biggest student event held in the history of the Institute. To kick off 'Synapse', a 5 and 8 km 'Youth Run' followed by a 'Youth Seminar' was organized on 27 January 2013 which witnessed over 1500 participants running together to support various causes the student community has endeavored to make a difference in. NGOs, schools, other institutes and faculty members joined together to participate in the initiative. The theme of this year's Youth Run was — passion for learning. Mr. Amitabh Shah, the founder and Chief Inspiration Officer (CIO) of YUVA Unstoppable was the main speaker at the Youth Seminar. 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-2013. The plethora of technical and cultural events that Synapse-2013 showcased enthralled audiences of all kinds – from those interested in the arts, to the geeks who only enjoy life in front of a computer screen.

### Sports

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 earlier years, and events that involved faculty, staff and students. An Annual Inter-College Sports Festival "Concours 2012" was also held on 1-4 November 2012 at DA-IICT. Shri Bhagyesh Jha, IAS, Commissioner and Secretary, Sports, Youth and Cultural Activities, Govt. of Gujarat, was the Chief Guest at the Opening Ceremony while Shri. Chitranjan Singh, IPS, Director General of Police, Gujarat, was the Chief Guest at the Closing Ceremony of Concours 2012. This event saw participation by students of various colleges from all over Gujarat.

### Cultural

The Cultural Committee continued its tradition of organizing highly successful and highly 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 calendered through-out the year.

Various festivals and national festivals like Independence Day, Gandhi Jayanti and Republic Day were also celebrated. The Cultural Committee along with the Sambhav Committee visited the blind people at the BPA (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 were made to strain their brain cells and recall those facts about Gandhiji that they had read in their school history textbooks.

To enrich the students with various hobbies such as theatre, dance, instrumental and vocal music, art etc workshops were conducted which act as a platform for 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 opportunities to show their talents.

'Maniere - the night of fashion' was and remains to be the most anticipated event. Students from all the batches are given an opportunity to bring forth their creative and aesthetic skills when they were subjected to design their costumes on the basis of a particular theme. The theme of this year was 'Gangster', which brought out the hitherto unknown side of each participant's persona.

The musical talent of the students of the Institute was at its best during the much-awaited event 'Raaga'. The musicians proved their mettle against the rest when many prizes were won in the categories of Indian Solo, Indian Group, Western Solo and Western Group. An important addition was the category of 'Bollyrock' which became the highlight of the show. In another event 'Rang Manch', the scriptwriters and the dramatists put on their thinking caps and presented wonderful and colourful plays depicting various aspects of India's social and cultural heritage.

## 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 include the Film Club, DA-IICT Theatre Group (DTG), Prayaas, Sambhav, The Press Club, Forward Forum, Quiz Club, Martial Arts Club, Dance Club, Debate Club.

While Film Club provides regular entertainment to DA-IICTians in the form of screening of popular cinema, the DA-IICT Theatre Group (DTG) has been motivated by the Budhan Theatre Group of Ahmedabad and is focused on producing prosceniums and street plays.

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 students' group at DA-IICT which strives to bring 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, Gandhi Jayanti, etc. One event worth mentioning was the Independence Day Celebration with the children from Deaf and Dumb School, Blind School and Orphanage. These children were served 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.

The Press Club brings out an e-magazine called Entelechy, with sections ranging from global news to DA-IICT news, movie, book and music reviews, poetry, technical articles and debates.

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





Quiz Club organizes regular quiz events on campus, and encourages students to participate in various quiz competitions around the country.

Martial Arts Club has regular martial arts and yoga classes.

Dance Club - the Dance Coders, tries its best to combine the deep-seated passion for the art with dedication and teamwork.

Debate Club has grown remarkably since its inception in 2009. Besides conducting its weekly debates and Intra-college Debate competitions, the club has also organised a Youth Parliament and an Inter-college Parliamentary Debate.

Apart from these social activity clubs, there are clubs with a more serious academic interest. Electronics Hobby Club (EHC), DA-IICT 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 has been committed to actively promote the use of Linux and other open source software for strengthening the objective of worldwide open source movement.

Various other student clubs were active during the year and organized their own events for student groups ranging from a few dozens to a few hundreds.

Notable among these clubs were The Aryans and The Programming Club. DA-IICT has a recognized Band, which is named as 'The Faculty'.

## IEEE Student Branch Activities

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

I.Fest, the Annual Technical Festival, was organized by the IEEE Student Branch of DA-IICT on 6-7 October 2012 to bring the budding engineers from all over India to a common platform so that they can share their knowledge with fellow imaginers.

IEEE IAS student branch DA-IICT organized its flagship event The Summer Internship Talk Experience on 16 August 2012 which gave a common platform to students, who did various industrial and research internships, to guide and motivate other students and share their experiences of work and fun. The plethora of speakers included Industrial Interns from Google, GSoC, Qualcomm, Duke TIP and LinkedIn and Research Interns from IIT Bombay, IIIT Hyderabad, Information Retrieval lab at DA-IICT and Homi Bhabha Research centre.

Ms. Ruzan Khambatta gave an inspiring talk on Social Entrepreneurship and Women Empowerment on 15 March 2013. She is the Director of N Wave Tech Pvt. Ltd and E Comm Opportunities Pvt. Ltd.



and the proprietor of Reachgujarat.com and Wizz O Tech. She was amongst the 12 people chosen all over India for British Chevening Scholarship for Advanced Management Programme for Young Indian IT Professionals 2001-2002. Ruzan also mentors budding entrepreneurs at CIIE in IIM Ahmedabad, eDC in IIT Delhi, TIE in Indus Ahmedabad, The Entrepreneurship Cell in IIT Bombay, Tata Nen etc. With her mentoring session, Ruzan has helped many budding entrepreneurs to start up, stabilize, overcome critical stages, grow and navigate their businesses. She has helped them to gain invaluable insights beyond their own education and experience. Through this event, a spirit of social entrepreneurship was also fostered among the students. They learned the importance of social initiatives like women empowerment and emancipation.

Mr Peter Magyar, the IAS CMD Chair, and his wife, Monika Magyar, shared their enthusiasm for student activities under IEEE IAS on 3 April 2013. They invited IEEE IAS members of DA-IICT Student Branch over a luncheon interaction at the TAJ Gateway Hotel.

Summer School was organized for the third time by the IEEE Student Branch on 1-15 June 2013. It was a two week long workshop, with the main aim of bringing together Technology and Design, which are very essential to develop any successful product. Budding engineers from all over India got a common platform to explore, learn, and innovate.



The students got an opportunity to learn the whole cycle of developing products and work in teams to make something truly awesome.

Mr Prabodh Sirur, the HR Manager at CGI Bangalore, gave a motivating talk on 26 June 2013. The talk covered all the dimensions ranging from the domains of process management, interview and soft skills to giving exposure about the company organization, work culture and code of conduct. The speaker encouraged student interactions during the talk and asked them to perform several small tasks in between as well.

## STUDENT ACHIEVEMENTS

### Awards

Ankita Mehta, BTech 2010 batch student, won the "Outstanding Woman in Engineering (WIE) Award 2012" conferred by WIE Affinity Group of IEEE Student Branch, Nirma University in association with IEEE Gujarat Section and IEEE Region 10 (Asia and Pacific) in November 2012. She is also serving as the Google Student Ambassador.

Ankita Mehta, BTech 2010 batch student, was selected as the scholarship recipient from all over India by the Anita Borg Institute for Women and Technology to attend the Grace Hopper Conference 2012 to celebrate Women in Computing from 12-14 December 2012 at Bangalore.

Ankita Mehta, BTech 2010 batch student, was selected among Top 16 Google Student Ambassadors (GSAs) for the term 2012-2013 from a total of 123 GSA's across India.

Ankita Gupta, BTech 2010 batch student won 3rd Prize at Startup Weekend Ahmedabad held at IIM-Ahmedabad for pitching an idea called Event Flow.

A team of three BTech 2010 batch students, Ankita Mehta, Sharan Shodhan and Om Thakkar, was ranked 147th in the ACM-ICPC 2012, Asia Region, Onsite Contest and Ranked 219th ACM-ICPC Online Coding Contest held in December 2012.



A team of four BTech 2011 batch students, Abhinav Tripathi, Anuj Kosambi, Jaydeep Solanki and Somsubhra Bairi, was judged second runner-up in Microsoft Imagine Cup under World Citizenship category for India finals held at Hyderabad on 10 April 2013. The team developed an app for Windows Phone 8 platform that lets a blind person read at his own without any help from anyone else and received a cash prize of INR 60,000 and each team member also got a Nokia Lumia 920.

Nagendra Chowdary, BTech 2010 batch student, was judged runner up in the western region in the first edition of the IET India Scholarship Award – Regional Rounds that took place in Pune on 20 July 2013 at College of Engineering Pune. In the third and final round, the participants made their presentations on the topic 'Technological Solutions for Effective Water Management'. He received cash prize of INR 20,000.

Mayank Ladha, BTech 2012 batch student, was Semi-finalist in Ahmedabad Mirror Talent Hunt – 2013.

Zeel Shah, BTech 2010 batch student, Raj Buddhdev, BTech 2011 batch student, won the first prize in 2013 Industry Application Society's (IAS) Web Chapter Contest.

Vaibhavi H Desai, BTech 2011 batch student, won first prize in "Women in Industry Awareness Challenge" organised by Industry Application Society (IAS) and Woman in Engineering (WIE) chapters of DA-IICT.

Seventeen DA-IICT students have been selected for the Google Summer of Code (GSoC)-2013 contest from over 100 countries across the world for the prestigious "Google Summer of Code 2012 internship". These interns worked on different projects under GSoC for three-month home-based internship and each got a stipend of \$5,000.

Saksham Gupta, BTech 2nd year student, and Brijesh Patel, BTech 3rd year student, were awarded the prestigious Myron Zucker Travel Award given by the IEEE Industrial Application Society (IAS) for

academic and overall excellence. The award will enable them to attend the IEEE Industry Application Society (IAS) Annual Meeting 2013 to be held at Orlando Florida, USA, on 6 October 2013.

Megha Tak represented IAS SB DA-IICT in the Applied Power Electronics Conference (APEC) held in USA in March 2013.

A grant of \$500 was awarded for the best presentation in 2nd All Indian IAS workshop in TSEC Mumbai in April 2013. Projects on ADICCS and sickle-cell anaemia, each got a grant of \$500 for execution of the project.

DA-IICT was also awarded the Outstanding IEEE Student Branch Chapter Award 2013 as well as the first prize in IEEE Industrial Application Society's (IAS) Web Chapter Contest.

The Institution of Engineers (India), Gujarat State Centre, awarded the 'Sarojaben Ashwinray Doshi & Parivar Gold Medal' to Mr Naman Vipulkumar Turakhia, BTech (ICT) Graduate of 2009-13 batch for scholastic performance. Mr Turakhia is now pursuing his MS in USA.

## Sports, Cultural and Other Achievements

DA-IICT Girls Table Tennis Team was declared the winner at PDPU Sports Fest'12. Lavanya Gupta, BTech 2012 batch student, was awarded the certificate for "Best Player of the Tournament (Girls)".

DA-IICT Band 'The Blue Frets' won First Prize in Western Group Category (Music) in the Event Rhapsody held during Synapse in March 2013. The band members are Anurag Singh – Vocalist (BTech 2010 batch student), Palash Jain – Drummer (BTech 2010 batch student), Jaysheel Goda – Guitarist (BTech 2010 batch student) and Zubin Kapadia – Bass (BTech 2011 batch student).

Siva Sankar (Keyboard) and Dhruvi Shah (BTech 2012 batch student) won the award of the second best speaker in Senate – Parliamentary Debate held during Synapse in March 2013.

## Internships and Publications

Megha Tak, BTech 2010 batch student, got selected for the MITACS Globalink Scholarship Program 2013 for a 3 month internship in Canada. She completed her internship on “Biomedical Signal Processing” during May - August 2013 in Ryerson University, Toronto, Canada.

Ankita Mehta, BTech 2010 batch student, worked as a Research and Development intern with Carnegie Mellon University, USA.

Nikhil Poonawala, Nirmal Patel and Sharan Shodhan (BTech 2010 batch students) were invited for summer internship at Human-Computer Interaction Institute, Carnegie Mellon University, Pittsburgh, USA, from 15 May to 25 July 2013.

Tanvina Patel (under the guidance of Prof Hemant Patil) received ISCA student grant for presenting a paper at INTERSPEECH 2013, Lyon, France.

Vidisha Jitani (BTech 2010 batch student) got selected in the Summer Research Fellowship Programme (SRPF), which is conducted by Indian

Academy of Sciences. She worked as a Summer Research Fellow at the Indian Institute of Technology, Bombay.

Puneet Kala (BTech 2009 batch student) got selected in Google Summer of Code, 2013 and worked as an Intern on an open-source project for “Joomla” for three months.

Swena Gupta, BTech 2010 batch student, was recognized as the Oracle Certified Professional, Java SE 6 Programmer, by the Oracle Certification Program in June 2013.

Sayli Dighde and Paresh Vadhvani (BTech 2012 batch students) received full support to present their paper titled “Automated Driver cum Intelligent Alert Anti-Collision System (ADIAACS) at the IEEE Industrial Applications Society (IAS) Annual Meeting held in Orlando, Florida, USA, 5-11 October 2013.

Shubham Jain, PhD Scholar, presented his research-in-progress in Doctoral Colloquium in a top-tier conference in sensor networks ACM SenSys’12 held at Toronto, Canada, 6-9 Nov. 2012.

Dharmani Bhaveshkumar C., “Proposal of a Search for Rotation based Independent Component Analysis (SRICA) Algorithm”, paper published in the Proceedings of the Fourth International Conference on Signal and Image Processing 2012 (ICSIP 2012), Lecture Notes in Electrical Engineering, vol. 221, pp.411-421, Springer India 2013.

Dharmani Bhaveshkumar C. “Extended Form: Analysis and an Operator Exploiting it,” paper published in Proceedings of Seventh International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2012), Advances in Intelligent Systems and Computing, vol. 201, pp. 263-274, Springer India, 2013.

Rural Internship (BTech 2011 batch) Posters Display was arranged at LT-2 and LT-3 on 8 March 2013.





## Alumni Activities and Achievements

As part of its ongoing commitment to reach, engage and connect to its graduates, the DA-IICT Alumni Association organised the third Alumni Day at the Institute campus on Friday, 1 March 2013. The day began with the welcome addresses by the Director Prof S C Sahasrabudhe and Dean (Students) and Convener, Alumni Board, Prof Sanjeev Gupta followed by a discussion on “Views of the Alumni on the Alumni Day” where alumni and faculty members participated.

The Alumni Association activities also took place at various cities in India including NCR, Mumbai, Bengaluru, Ahmedabad and Hyderabad. For the first time, the DA-IICT Alumni Meet was also held in Boston, USA, in January 2013.

The DA-IICT Alumni Website (<https://daiict.almaconnect.com/>) was officially launched by the Director on the Alumni Day. Alma Connect, a company incubated by the DA-IICT Incubation

Centre (DCEI) and which has been co-founded by DA-IICT alumni, has developed this DA-IICT Alumni Web Portal. This will help the alumni, faculty and the students to register themselves on this portal.

The alumni (who were not able to visit their alma mater due to their prior commitments) had the opportunity of live interaction through Google Hangout on the Alumni Day. The Alumni Day celebrations concluded with the distribution of mementos followed by a group photograph. Later, the alumni also got an opportunity to participate in the DA-IICT’s Annual Techno-cultural Festival “Synapase”.

One of our Alumni, Mr Sumit Dagar of BTech 2004 batch, won the 2012 Young Laureates of the Rolex Awards (50,000 Swiss francs to implement his project, a Rolex chronometer and worldwide publicity) for Enterprise held at a function on 27 November 2012 in New Delhi by the renowned sportsman, film and TV personality Vijay Amritraj.



## Resource Centre

The Resource Centre (RC) has become a fuel-station for academic and research activities of the Institute. Whenever faculty and students need any piece of information for their academic requirements, they first search the RC resources. These resources include, printed books, journals, bound volumes, online databases and videos. The RC continued to play catalytical role in maintaining academic excellence at the Institute.

eResources are increasing rapidly and usage is spreading among the user-community. The student community still perceives the RC as a place to study with concentration in the academic ambience of books, journals, cubicles surrounding them. It is all reflected in the occupancy statistics. The RC print-book collection is on rise covering not just ICT studies but also humanities, literature, history and social sciences (refer to Additions to Collection Table below). Programmes and events spread throughout the year supported teaching, learning, research and scholarly activities of the Institute. New methods were adopted to provide available information in structured format for effective utilization and to facilitate the end-user. Based on the suggestions received from users and analysis of Management Info Stats (MIS), changes were effected in the section layouts. That had helped the users take advantage of the RC infrastructure effectively. Services like Current Contents, Content Page Service, Newspaper Clippings continued to keep users updated, not only in their subjects of interest but also in interdisciplinary branches and society in general. The RC's emphasis on both Print and Digital Resources helped the users balance learning activity by referring to both types of resources. Good numbers of useful specialized as well as general eResources were brought under one umbrella of the RC's website to facilitate users to find information from a single window. Proactive, innovative approach in disseminating right, useful and latest information using modern technological tools remained the main objective of the Resource Centre. Some of the significant activities and services carried out during the year of this report are given below.

### Print and Audio Visual Collection

The RC collection includes books, conference proceedings, reference books, CDs, VCDs, DVDs etc. The following Table presents the additions during the academic year 2012-13.

#### Additions to Collection

Collection Type	Added in 2012-13	Total as on 31 July 2013
Books	1563	28808
Bound Volumes of Journals	-	1850
Theses and Dissertations	37	376
Audio Visual Resources	82	3592
<b>Total Collection</b>	<b>1682</b>	<b>34626</b>

### Printed Books

Faculty helped the RC to develop its Print-Books collection. Out of **1404** suggestions/orders placed, the RC could procure **1070** Titles. Utmost care was taken in ordering and procuring the titles suggested by faculty for their courses (Course Reserves & Short-term Loans).

### Print-Journals

In the academic year 2012-13, the RC renewed print-journal subscriptions of **168** journals of which **92** were from the **9** academic disciplines and the remaining from interdisciplinary and allied subjects. **82** audio-visual resources were added during the year.

### Digital Resources

The RC subscribed to the following 12 digital resources during the year under review. The RC Committee has declared it as a core collection to support Institute's academic and research activity.

- ACM Digital Library
- ASA Digital Library
- AIP and APS Online Journals
- ASABE Technical Library
- IEL Online Library (IEEE*Xplore*)
- indiastat.com



- JSTOR Archive
- LNCS Online Collection
- ITU Recommendations
- Publications from USENIX
- ScienceDirect (Computer Science Collection)
- Springer Online Journals

These online resources contain more than 5000 peer-reviewed/specialised e-journals and statistical databases.

### Circulation Services

During 2012-13, over 16883 documents were issued to users. These documents included books, reference books, current and bound volumes of journals and audio - visual materials and were mainly circulated among the faculty, students and staff members of the Institute.

### Resource Sharing (Inter-Library Loan Service)

The Resource Centre has been taking an active part in resource-sharing activities with local libraries and the libraries at the national level through ADINET, DELNET and INFLIBNET library networks. During the reporting period, the RC borrowed 28 books and lent 29 books to other institutions. It also received 91 research papers or articles from professional journals required by our faculty members and delivered 155 this year research papers/articles to other institutions.

To further support academic and research activity, the RC has become a member of Development Library Network (DELNET). This membership entitles access to all the databases created by this network, and support on Inter Library Loan and Document Delivery Services.

### Institutional Memberships

Institutional Membership of other professional bodies, institutions and consortia play an important role in providing information from the sources not stocked by the RC. The RC renewed the membership of 12 professional bodies, institutions and consortia and availed the benefits of participation in professional

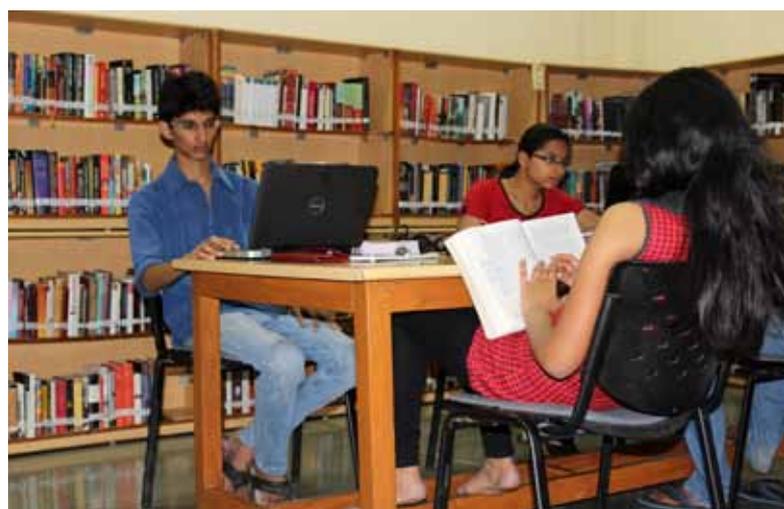
programs. The RC is a member of Ahmedabad Library Network (ADINET), Ahmedabad Management Association (AMA), American Society of Agricultural and Biological Engineers (ASABE), British Library, Ahmedabad, Computer Society of India (CSI), Indian National Digital Library in Engineering Science and Technology Consortium (INDEST), International Telecommunication Union (ITU), UGC-Infonet Digital Library Consortium, USENIX: The Advanced Computing Systems Association (ACSA) among others.

### Project Reports

The RC has been maintaining a collection of all PhD theses, MTech dissertations and MDes Projects (both print and digital formats) submitted by students of DA-IICT. From this year MSc(ICT-ARD) dissertations were also added to the collection. Efforts made to collect, organize and provide access to all the BTech project reports of the last four batches were successful and now 17 print copies of the Project Reports are added to the Institutional Repository. These reports are now available in both print and digital form for consultation. A separate batch-wise catalogue providing details of each project along with an abstract is now available on the internet through the RC website.

### Research Information

To promote and support the Institute's research undertakings, the RC continued to put its concerted efforts in tracking and providing updated information relating to "Call for Research Proposals" and "Research Funding Sources". The faculty and researchers have found this service useful in identifying potential projects for funding.



## Access to Special Lectures

During reporting period, the RC continued its efforts to collect, organize and provide access to the information relating to all special lectures held in the Institute. These included a collection of Power Point presentations and video recordings of 2 lectures delivered by prominent persons. The list with links to presentations and video recordings of all possible events is now made available through RC website.

## Preview Room Facility

The RC has a preview room which is equipped with multi-media projector, DVD player, audio-amplifier with high-quality sound system to view in-group the education materials in support of teaching and learning. Faculty from Humanities and ICT-ARD extensively used the facility and arranged lectures here taking advantage of the facilities. Special Interest Groups like MyKindOfMusic too used Preview Room for their monthly experience-sharing meetings. Occasionally Placement Cell of DA-IICT arranged group-presentations for visiting companies at the Preview Room. Preview Room is also used for Academic Orientation programmes for freshers. More than 89 group viewings were arranged during the year.

## Reference and Information Services

To promote the effective use of available resources, the RC continued all the information services introduced in the previous years with updated information. These services were well received by the student community. A new service i.e., 'Topical

Display on Course-related Titles" was introduced during the year to create awareness about collections available in the RC and thereby promote reading habits among students. Also, 6 new bibliographies were compiled on different subjects to promote the use of collections.

## Digital Repository of Scholarly Resources (DRSR)

The DRSR which was launched last year to collect, organize, preserve, provide access to, and promote dissemination of the scholarly output of the DA-IICT Community, was well-received by the faculty and students. The metadata-database of the faculty publications, research papers, journal articles and other professional presentations serves as a platform to the faculty, researchers, and students of the Institute to share their research work with wider community. Currently it hosts close to 1881 resources.

## Infrastructure

A new PC and wireless-mouse/keyboard were added to Preview Room infrastructure to further facilitate use of equipment.

## Orientation and Information Literacy Programs

A detailed orientation program to introduce the new entrants to various programs (BTech, Masters & PhD) with the RC collection, facilities and services was held from 24-26 July 2013. The sessions were conducted in twelve batches of 75 minutes each.

## Visitors to RC

Institution	No. of visitors	Date
Department of Library & Information Science, Gujarat University, Ahmedabad	30 Students + Faculty	10 January 2013
Department of Library & Information Science, S P University, Vallabh Vidyanagar, Gujarat	20 Students + Faculty	20 February 2013



## Seminar Organised

A one-day seminar for library professionals was arranged at the Resource Centre on 16 February 2013 in association with ADINET (Ahmedabad Library Network). "Using Open Access Resources for Professional Development" was the topic of the seminar. Prof. Laxminarayana Pillutla, faculty member DA-IICT, was the keynote speaker who shared his experiences on "Library as a space to nurture inquisitive minds - role of the librarians". 50 library professionals from Gandhinagar, Ahmedabad and places around attended this unique seminar.

## Internship

As part of its regular internship program for fresh library science graduates, the RC recruited three MLISc graduates in August 2012 for one year and offered monthly stipend. These fresh graduates were given training in all areas of LIS work including handling of digital resources.

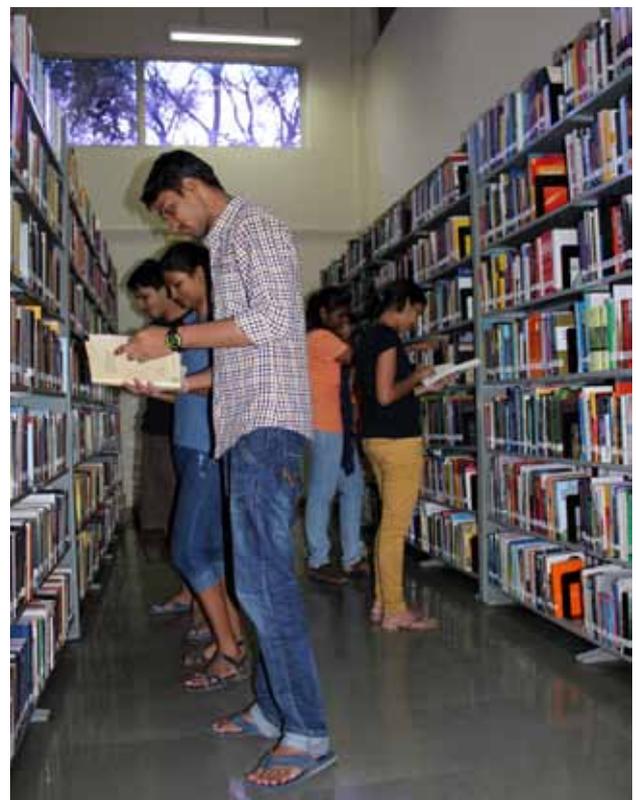
## Staff Training

For efficient delivery of services, domain-centric staff training is needed to upgrade their knowledge and skills. During 2012-13, the following staff members attended the workshops/seminars.

- Satish Deshpande, Prasanna Kumar, Saurabh K Prajapati and Manish Goswami attended one day seminar on "User Oriented Quality Services in 21st Century Libraries" organized by Ahmedabad Library Network (ADINET) and INFLIBNET at Entrepreneurship Development Institute of India, Bhat, on 11 August 2012.
- Saurabh Prajapati attended a five Sundays Seminar on "Basics of Intellectual Property Laws" organised by Ahmedabad Management Association, Ahmedabad, from 28th April to 26 May 2013.
- Saurabh Prajapati attended a three day National Workshop on "Drupal: A Content Management Software" organised by Ghokhle Institute of Politics and Economics (GIPE), Pune, 26-28 October 2012.

## Paper Published

- Joshi, Namrata and **Prajapati, Saurabh** "Academic Libraries and Cloud Computing," in Proceedings of 9th International CALIBER 2013 (Editors Dr. Jagdish Arora, et al). Gandhinagar, INFLIBNET, p. 160-171, February 2013.



## Infrastructure

The strengthening of ICT infrastructure supportive to teaching and research has always been a priority for the Institute. During the reported period, the Institute acquired additional ICT resources worth Rs.120 lakhs. The major ICT and laboratory enhancements included procurements of IBM Blade Server, VMware License software, Microsoft Volume Licences, Oracle software Licences, Matlabs, Printers, Desktop computers, Laptops, Signal Processing and Wavelet Tool Boxes, Work Stations, Cameras, Network up-gradation and expansion of wireless connectivity.

DA-IICT has modern eco-friendly, fully networked campus with 1GBps optical fiber cable connectivity between various buildings and having 1GBps internet bandwidth.

The building and maintenance of infrastructure facilities have also been a priority for the Institute. Constructions for a new Hall of Residence (HoR) for Women with a capacity of accommodating 80

students and renovation of Hall of Residence (HoR) for Men have begun. These works are expected to be completed by the end of March 2014. Two classrooms in Continuing Education Program (CEP) building were upgraded with wooden flooring. With certain modifications in the design of one of the Laboratories, the number of seats was increased and additional furniture was provided. One of the major renovation works completed was redesigning and erecting the four tensile structures in food courts and reconstructing their roof with FRP sheets. The other works completed were installation of geysers in Men's and Women's HoRs, renovation of canteen fountain, food courts, relocating the water coolers and creating hand-washing facilities around food courts. The sports facilities were strengthened by setting up a volleyball court for girls, upgradation of two badminton courts with portable net poles and maintenance of basketball court and servicing the equipment in Gymnasiums.





## Annexure 1

### MANAGEMENT

#### Academic Council

Prof S C Sahasrabudhe, Chairman	Director, DA-IICT
Shri K Narayan	Management Consultant, Reliance ADA Group, Mumbai
Prof Surendra Prasad	Director, Indian Institute of Technology Delhi, New Delhi
Prof David Koilpillai	Professor & Dean (Planning) Indian Institute of Technology Madras, Chennai
Shri Suresh Rangachar	President, Reliance Communications Limited
Prof Sanjay Chaudhary	Dean (AP), DA-IICT, Gandhinagar
Prof V P Sinha	Professor, DA-IICT, Gandhinagar
Prof Ganesh Devy	Professor, DA-IICT, Gandhinagar
Prof Ashok Amin	Professor, DA-IICT, Gandhinagar
Prof Samaresh Chatterjee	Professor, DA-IICT, Executive Registrar (I/c) (till 30 November 2012)
Shri Soman Nair, Secretary	Executive Registrar, DA-IICT, Gandhinagar (from 1 December 2012)

#### Finance Committee

Prof S C Sahasrabudhe, Chairman	Director, DA-IICT, Gandhinagar
Shri K Narayan	Reliance Group, Mumbai
Shri Surendra Pipara	Reliance Group, Mumbai
Prof Samaresh Chatterjee	Professor, DA-IICT, Executive Registrar (I/c) (till 30 November 2012)
Shri Soman Nair, Secretary	Executive Registrar, DA-IICT, Gandhinagar (from 1 December 2012)

### INSTITUTE OFFICIALS

#### Director

Prof S C Sahasrabudhe

#### Executive Registrar

Shri Soman Nair (from 29 November 2012)

#### Deans

##### Academic Programs

Prof Sanjay Chaudhary (till 31 May 2013)

Prof Sanjeev Gupta (from 1 June 2013)

#### Chief Librarian

Shri Satish Deshpande (Consulting Librarian)

#### Research and Development

Prof Anish Mathuria

#### Resource Centre Committee

Prof M V Joshi, Convener

Prof Gautam Dutta, Member

Prof Preetida V Jani, Member

Shri Satish Deshpande, Member Secretary

#### Students

Prof Sanjeev Gupta



### **ICT Committee**

Prof C Vijaykumar, Convener  
Prof Amit Bhatt, Member  
Prof Anjan Ghosh, Member  
Shri Nimesh patel, Member  
Prof Rahul Dubey, Member  
Shri Rajendra Shah, Member

### **Placement Committee**

Prof Ranendu Ghosh, Convener  
Prof Amit Bhatt, Member  
Prof Asim Banerjee, Member  
Prof Prabhat Ranjan, Member  
Prof V Sunitha, Member

### **Web Committee**

Prof Laxminarayana Pillutla, Convener  
Prof Jaideep Mulherkar, Member  
Prof Minal Bhise, Member  
Prof Sourish Dasgupta, Member

### **CEP Committee**

Prof Manjunath V Joshi, Convener  
Prof Mehul Raval, Member  
Prof B N Hiremath, Member  
Prof Mazad Zaveri, Member

### **Annual Report Committee**

Shri Satish Deshpande - Convener  
Prof Sanjay Chaudhari, Dean (Academic Programs)  
– Member  
Prof Anish Mathuria, Dean (R & D) – Member

Prof Sanjeev Gupta, Dean (Students) - Member  
Prof B N Hiremath - Member  
Prof Madhumita Mazumdar - Member  
Shri Soman Nair, Executive Registrar - Member

### **Disciplinary Committee**

Dean – Students, Convener (Ex-officio)  
Warden, Gents Hostel (Ex-officio)  
Warden, Ladies Hostel (Ex-officio)  
Dy Registrar (Ex-officio)  
Student members (2)

### **Gender Cell**

Prof Binita Desai, Convener  
Ms Geeta Mehta, Member  
Prof Radha Parikh, Member  
Prof Anjan Ghosh, Member  
Dr Neeta Shah (Director, Gujarat Infomatics Limited)  
– External Member  
Student Representatives (4)

### **Student Activities Council**

Prof Mukesh Tiwari, Sports Counsellor  
Prof Madhumita Mazumdar, Cultural Counsellor

### **Alumni Board**

Dean – Students, Convener (Ex-officio)  
Prof Anil Roy, Member  
Prof Asim Banerjee, Member  
Prof Rahul Muthu, Member



## Annexure 2

### THESES, PROJECTS AND REPORTS

#### PhD Theses (Submitted)

1. Joshi, Gauri Hiren. Coordinated adaptive power management (CAPM) technique for sensor network nodes; xvi, 145 p.; 2012. (Supervisors: Ranjan, Prabhat)
2. Purushothaman A. Design automation of analog to digital converters based on geometric programming; vi, 81 p.; 2012. (Supervisor: Parikh, Chetan D.)
3. Shah, Pratik. On curve reconstruction in Riemannian Manifolds; xviii, 107 p.; 2012. (Supervisor: Chatterji, Samaresh)

#### MTech Theses

##### Communication Systems

1. Barot, Dipenkumar K. Design of optically actuated MEMS based optical switch using bragg grating; xi, 68 p.; 2013. (Supervisor: Ghosh, Anjan)
2. Kacheria, Rachit M. HDL implementation of palm associative memory; viii, 34 p.; 2013. (Supervisors: Zaveri, Mazad)
3. Keshvala, Sanjaykumar S. Indoor target tracking using wireless sensor networks; ix, 39 p.; 2013. (Supervisor: Pillutla, L. S.)
4. Panchratna, Digvijay. Investigation on spatial arrangement of transceiver arrays in free space optical communication system; 2013. (Supervisor: Ghosh, Anjan)
5. Pathak, Anusha. Multiband cooperative spectrum sensing in cognitive radio networks; viii, 52 p.; 2013. (Supervisor: Chakka, Vijaykumar)
6. Sailor, Hardik Bhupendra. Objective evaluation of speech quality of text-to-speech (TTS) synthesis systems; xii, 85 p.; 2013. (Supervisor: Patil, Hemant)
7. Shah, Nirmesh Jayeshkumar. HMM-based speech synthesis system (HTS) for Gujarati language; xi, 90 p.; 2013. (Supervisor: Patil, Hemant)

8. Talesara, Swati. Design of syllable-based speech segmentation methods for text-to-speech (TTS) synthesis system for Gujarati; xii, 79 p.; 2013. (Supervisor: Patil, Hemant)
9. Vachhani, Bhavikkumar Bhagvanbhai. Phonetic segmentation: unsupervised approach; xiv, 89 p.; 2013. (Supervisor: Patil, Hemant)
10. Zaki, Mohammadi. Financial time series analysis and prediction using Chaos theory, HHT and SVR; xv, 143 p.; 2013. (Supervisor: Patil, Hemant)

##### Computer Network Systems

1. Aroor, Anoop. QoS aware distributed service composition using agents; ix, 45 p.; 2013. (Supervisors: Dasgupta, Sourish)
2. Arora, Sunil. Multipath verification defense against SSL stripping attack; vii, 52 p.; 2013. (Supervisor: Mathuria, Anish M.)
3. Bohara, Mohammed Husain. RESTful web service integration; vii, 27 p.; 2013. (Supervisor: Chaudhary, Sanjay)
4. Gupta, Arun Kumar. Energy efficient protocol for connected dominating set management in wireless sensor network; xi, 66 p.; 2013. (Supervisor: Sunitha, V.)
5. Maloo, Anshul. Design of fiber to the village using passive optical networks; ix, 45 p.; 2013. (Supervisor: Ghosh, Anjan)
6. Padia, Ankur. NL2DL: a platform for formal ontology learning and evaluation; vii, 57 p.; 2013. (Supervisor: Dasgupta, Sourish)
7. Parekh, Deep Ashvinbhai. Approach for scalability in software as a service; ix, 45 p.; 2013. (Supervisor: Chaudhary, Sanjay)
8. Patel, Rupali. Formal semantic analysis and modeling of natural language Wh-question; viii, 62 p.; 2013. (Supervisor: Dasgupta, Sourish)
9. Reddy, A. Ravichandra. Community based co-operation protocol for social networks; vi, 47 p.; 2013. (Supervisor: Srivastava, Sanjay)
10. Reddy, Narender A. Migration in initial and dynamic virtual machine placement algorithms; vi, 36 p.; 2013. (Supervisor: Chaudhary, Sanjay)



11 Shah, Kushal. Text normalization and non-monotonic knowledge base revision for consistent ontology learning; viii, 57 p.; 2013. (Supervisor: Dasgupta, Sourish)

### Machine Intelligence

1. Bansal, Sumukh. Manifold valued image segmentation; vi, 31 p.; 2013. (Supervisor: Tatu, Aditya)
2. Chhayani, Nirav Hitendrabhai. Person recognition using humming, singing and speech; xv, 72 p.; 2013. (Supervisor: Patil, Hemant)
3. Desai, Abhi Hitesh. Study on shock graphs: graph representation of objects; vii, 28 p.; 2013. (Supervisor: Tatu, Aditya and Sunitha, V.)
4. Holani, Mukesh. Texture classification using morphology based features; vii, 39 p.; 2013. (Supervisor: Tatu, Aditya and Banerjee, Asim)
5. Jain, Deshna. Exploring suitable classifier for robust face and facial expression recognition; xi, 44 p.; 2013. (Supervisor: Mitra, Suman K.)
6. Malde, Kewal Dhiraj. Studies on transcription, classification and detection of obstruents; xxxiv, 149 p.; 2013. (Supervisor: Patil, Hemant)
7. Mehta, Parth. Authorship attribution using quantitative analysis of languages; xiii, 40 p.; 2013. (Supervisor: Majumder, Prasenjit)
8. Pandya, Maulik. Classification of data on manifold; viii, 51 p.; 2013. (Supervisor: Tatu, Aditya)
9. Ramrakhiyani, Nitin. Approaches for temporal expression recognition in hindi; xi, 43 p.; 2013. (Supervisor: Majumder, Prasenjit)
10. Sisodiya, Neha. Text description of image; vi, 36 p.; 2013. (Supervisor: Joshi, M. V.)
11. Vyas, Jaladhi. Automatic target image detection for morphing; vii, 31 p.; 2013. (Supervisor: Joshi, M. V.)

### VLSI and Embedded Systems

1. Bajpai, Ishant Kumar. Circuit design for cervical dilation monitoring with time varying inductor

- sensor; vii, 31 p.; 2013. (Supervisor: Ghosh, Anjan)
2. Dhalvaniya, Pankaj. Low power SAR ADC with split capacitor DAC; x, 47 p.; 2013. (Supervisor: Sen, Subhajit)
3. Dholariya, Tarun. FIR filter for high speed 60 GHz wireless communications; viii, 37 p.; 2013. (Supervisor: Sen, Subhajit)
4. Dobaria, Renish. 16 bit dual threshold voltage conditional carry adder, ix, 30 p.; 2013. (Supervisors: Zaveri, Mazad)
5. Kapadiya, Anand. Phase locked loop (PLL) charge pump (CP) design for low power communication applications; x, 21 p.; 2013. (Supervisors: Sen, Subhajit)
6. Kiran V., V S S Ravi. Timing aware asic design flow (RC physical); viii, 61 p.; 2013. (Supervisor: Bhatt, Amit)
7. Lodha, Aditya V. SLAM (Self localization and mapping); vii, 47 p.; 2013. (Supervisors: Dubey, Rahul)
8. Nambiar, Sainath Gopi. RF power harvesting and enhancing throughput in optical link based sensor network; vii, 37 p.; 2013. (Supervisor: Ranjan, Prabhat)
9. Patel, Darshal. Low power ASIC design using CPF, x, 68 p.; 2013. (Supervisors: Bhatt, Amit)
10. Rathod, Gayatri Manohar. Analysis of various DFT techniques in the ASIC designs; viii, 37 p.; 2013. (Supervisors: Bhatt, Amit)
11. Rupapara, Kripal D. Study of power in CR-SRAM in context of precharge reference voltage; x, 42 p.; 2013. (Supervisor: Zaveri, Mazad)
12. Shah, Pratik Y. Verification of address generation unit and register file of digital signal processor using system verilog; viii, 52 p.; 2013. (Supervisor: Dubey, Rahul)
13. Sreekanth, M. CTS and CCOpt methodologies to achieve low skew-low power clock; xi, 45 p.; 2013. (Supervisors: Bhatt, Amit)

14. Vansadiya, Mayursinh K. Development of verification environment for multiply accumulate unit using system verilog; x, 64 p.; 2013. (Supervisors: Dubey, Rahul)
15. Vyas, Pavan R. HDL based implementation of a node of hierarchical temporal memory; 53 p.; 2013. (Supervisor: Zaveri, Mazad)

### MDes Project Reports

1. Dutta, Anindita. New Model of Masculinity: a reflexive discourse to fight sexual harassment; 51 p.; 2013. (Supervisor: Devy, Ganesh)
2. Gajjar, Jinisha. Tactile learning kit: know your continents; 35 p.; 2013. (Supervisor: Desai, Binita)
3. Ganguli, Avik. PlacesDA: campus social app for DA-IICT students to explore places; 56 p.; 2013. (Supervisor: Raje, Nitin)
4. Hegde, Padmini. Appe Midi: pickling the cultural and biological diversity of the Western Ghats in Karnataka; 28 p.; 2013. (Supervisor: Devy, Ganesh)
5. Kamath, Manu. Noticesda.in; 36 p.; 2013. (Supervisor: Raje, Nitin)
6. Malavia, Jenil. Information design: a concept for bus transit system; 96 p.; 2013. (Supervisor: Desai, Binita)
7. Oza, Manan Vijay. Interactive information delivery: enhancing tourist experience at Ajanta Caves; 90 p.; 2013. (Supervisor: Raje, Nitin)
8. Sunny, Ashna Liza. Tactile graphics: a teaching tool for visually impaired children; 45 p.; 2013. (Supervisor: Devy, Ganesh)

### MSc ICT-ARD Project Reports

1. Adhikari, Arun Kumar. Building value chain around grassroot innovations in agriculture sector; 18 p.; 2013. (Supervisors: Parikh, Alka)
2. Dantrolia, Subhan I. Preparation of detailed project report for Hirana village in Amreli district and conceptualization of human resource module for GSWMA; 38 p.; 2013. (Supervisors: Hiremath, B N)
3. Dholaria, Sanket. Study of the E-procurement of Tur from Tur producers/farmers via NSPOT for Tur board, Karnataka, India; 21 p.; 2013. (Supervisors: Mishra, Gaurav and Singh, Yashwant)
4. Hingrajiya, Smitkumar. Preparation of detailed project report for Moti Moladi village of Surendranagar district and conceptualization of human resource module for GSWMA; 37 p.; 2013. (Supervisors: Hiremath, B N)
5. Jat, Sohan L. Preparation of detailed project report for Bhuvad village of Kutch district and conceptualization of human resource module for GSWMA; 33 p.; 2013. (Supervisors: Hiremath, B N)
6. Jyoti, Jay Nath. Scouting, documentation and verification of grassroots innovations in agriculture sector; 28 p.; 2013. (Supervisors: Parikh, Alka)
7. Panchal, Prakash A. Study of E-procurement of Tur from Tur producers/farmers via NSPOT for Tur board, Karnataka; 22 p.; 2013. (Supervisors: Mishra, Gaurav)
8. Singh, Vishundeo. Study of E-procurement of Tur from Tur producers/farmers via NSPOT for Tur board; 25 p.; 2013. (Supervisors: Mishra, Gaurav)
9. Soni, Meghal S. Development of an application tool for census data representation for better decision making process in district planning; 32 p.; 2013. (Supervisors: Ghosh, Ranendu and Deomurari, Arpit)





## Annexure 3

### FACULTY WITH AREAS OF INTEREST

#### Regular Faculty

Name of the Faculty	Areas of Interest
<b>Amin, Ashok</b> PhD (Electrical Engineering)   Northwestern University, USA	Graph algorithms, network reliability, program complexity, models of diagnosable systems
<b>Banerjee, Asim</b> PhD (Electrical Engineering)   IIT Bombay	Pattern recognition, medical imaging, image processing, digital signal processing, speech coding, software engineering, software quality assurance and project management
<b>Bhateja, Punnet</b> Ph.D. (Computer Science)   Chennai Mathematical Institute, India	Formal Methods used for Testing and Verification
<b>Bhatt, Amit</b> PhD (Electrical Engineering)   North Carolina State University, USA	3D IC, computer architecture, low power methodology in digital design
<b>Bhise, Minal</b> PhD (Computer Science)   BITS Pilani	Semantic web, distributed databases, software system analysis and design
<b>Chatterji, Samaresh</b> PhD (Mathematics)   Wayne State University, USA	Algebra, discrete mathematics, computer simulation and applications
<b>Chaudhary, Sanjay</b> PhD (Computer Science)   Gujarat Vidyapith, Ahmedabad	Distributed computing, service oriented architecture and ICT applications in agriculture
<b>Das, Manik Lal</b> PhD (Information Technology)   IIT Bombay	Information security, cryptography, system design and analysis
<b>Dasgupta, Sourish</b> PhD (Computer Science)   University of Missouri-Kansas City USA	Distributed multi-agent system, semantic web, artificial intelligence
<b>Desai, Binita</b> BFA (Fine Arts)   MS University, Baroda   Animation   National Institute of Design, Ahmedabad	Animation, communication design and multimedia
<b>Devy, Ganesh</b> PhD (English)   Shivaji University, Kolhapur	Comparative literature, cultural studies
<b>Divakaran, Srikrishnan</b> PhD (Computer Science)   Rutgers University, USA	Design and analysis of algorithms for problems in bioinformatics, machine scheduling and distributed systems
<b>Dubey, Rahul</b> PhD (Electrical Engineering)   IIT Roorkee	Design and prototyping of digital systems, factory automation

**Dutta, Gautam**

PhD (Physics) | Physical Research Laboratory,  
Ahmedabad

Quantum computers, signal processing, image processing,  
particle physics

**Ghodgaonkar, Deepak**

PhD (Electrical Engineering) | University of Utah,  
USA

RF and microwave engineering, Microwave measurements,  
microwave characterization of composite materials, biomedical  
applications of microwaves, RFID and metamaterials

**Ghosh, Anjan**

PhD (Electrical Engineering) | Carnegie Mellon  
University, USA

Optical computing, optical communications and networking,  
photonics, meta-materials, chaos, sensors, sensor networking,  
MEMS, instrumentation, e-health, open-source software,  
engineering education

**Ghosh, Ranendu**

PhD (Soil Science and 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, 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.

**Jani, Preetida V.**

PhD (Electrical Engineering) | University of  
Technology, Sydney, Australia

Wireless and cellular networks, mobile networks, ubiquitous  
connectivity, data compression algorithms, network security,  
wireless systems, cognitive radio

**Jat, Pokhar Mal**

MTech (Mechanical Engineering) | IIT Delhi

Databases, software design and semantic web

**Joshi, Manjunath V.**

PhD (Electrical Engineering) | IIT Bombay

Computer vision, image processing, super-resolution,  
restoration, signal processing, digital communication

**Kollipara, Bharani**

Ph.D. (English Literature) | English and Foreign  
Languages University, Hyderabad, AP.

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, Kolkata

Social history of science, technology and medicine in India, cultures of communication and media

**Mishra, Biswajit**

Ph.D. (Electrical & Electronics Engineering, University of Southampton, UK)

Ultra low power and subthreshold 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) | Indian Statistical Institute, Kolkata

Image processing, pattern recognition, fractal, Bayesian network, digital image watermarking

**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, algorithms

**Nagchoudhuri, Dipankar**

PhD (Electrical Engineering) | Michigan State University, USA

VLSI design, CMOS circuits and technology, biomedical signal processing chip design

**Pandya, Vishvajit**

PhD (Anthropology) | University of Chicago, USA

Material culture, design and communication culture, visual anthropology, rituals and history

**Parikh, Alka**

PhD (Agriculture and Allied Economics) | Cornell University, USA

Rural development and the related issues like agriculture, poverty, unemployment and wages, rural finance, environment and development, disaster management

**Parikh, Radha**

PhD (Special Education) | University of Missouri, Columbia, USA

Communication, value education, constructivist approach to teaching and learning, technology in education (e-learning)

**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

**Ranjan, Prabhat**

PhD (Physics) | University of California, Berkeley, USA

Wireless sensor network, robotics and embedded systems, nuclear fusion, Linux operating system

**Raut, Manoj Kumar**

PhD (Mathematics) | IIT Madras

Combining decision procedures, theorem proving, knowledge representation and reasoning, logic

**Raval, Mehul S.**

PhD (Electronics and Telecommunications) | University of Pune

Digital image processing, digital watermarking

**Roy, Anil**

PhD (Physics) | IIT Delhi

Fiber optics and optical communication, quantum optics, nanotechnology, semiconductor devices

**Sahasrabudhe, S. C.**

PhD (Communication/Signal Processing) | Leningrad University, USSR

Communications, signal and image processing and microprocessor applications.

**Sarkar, Aditi Nath**

M.A. (South Asian Languages and Civilizations) | University of Chicago, USA

Literature, religion, cultural history, south Asian civilization studies

**Sen, Subhajit**

PhD (Analog VLSI Design) | University of Waterloo, Canada

Analog and RF microelectronic circuit design: signal conditioning and data-acquisition for sensor applications, frequency synthesis, low-power circuits for instrumentation and biomedical applications, energy harvesting techniques, non-linear analysis of electronic circuits.

**Sinha, V. P.**

PhD (Electrical Engineering) | University of London, UK

Digital signal and image processing, theory of communication, discrete mathematics and logic, modern Fourier theory

**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 and distributed computing, theoretical computer science, interconnection networks

**Tatu, Aditya**

PhD (Image Analysis) | University of Copenhagen, Denmark

Mathematical image processing, shapes, image features

**Tiwari, Mukesh**

PhD (Optical Science and Engineering) | University of New Mexico, USA

Statistical physics, non linear dynamics, quantum transport, surface science

**Vijaykumar, C.**

PhD (Communication Engineering) | REC Tiruchirapalli

Digital signal processing, estimation theory, wireless communications, speech processing

**Zaveri, Mazad**

PhD (Electrical and Computer Engineering) | Portland State University, Oregon, USA

Cortex-inspired computational models: artificial and spiking neural networks, associative memories, intelligent signal-processing, Bayesian inference, hierarchical and modular models of the mammalian cortex, neuromorphic hardware, circuits and architectures: digital and mixed-signal vlsi, nano-architectures, hybrid nanotechnology - CMOL, architecture performance/price assessment, hardware design-space exploration



## Visiting Faculty

### Name of the Faculty

#### **Mishra, Gaurav**

Ph.D. (Information and Communication Technologies for Rural Development) | University of Reading, UK

#### **Mukerji, Maitrayee**

Fellow (Rural Management), Institute of Rural Management, Anand (IRMA), MSc (Computer Science), University of Allahabad

#### **Sharan, Girja**

PhD (Agricultural and Biological Engineering) | Cornell University, USA

### Areas of Interest

E-Governance ICT for development, communication for development, rural development, human-computer interaction

Management Information Systems (MIS), Strategic Information Systems (SIS), ICTs and Development, e-Governance

Modeling of agricultural and biological systems, technology for arid areas, earth-tube-heat-exchanger, greenhouse, dew harvest condensers, radiation-cooling

## Adjunct Faculty

### Name of the Faculty

#### **Banerjee, Nandini**

Ph. D. (Economics) | R. D. University, Jabalpur

#### **Banerjee, Soumitra**

MBA | Indore University

#### **Bhargava, Naval Kishore**

PGDM (Marketing & Finance) | IIM Calcutta

#### **Dasgupta, Kuntala**

B Sc Calcutta University | West Bengal

#### **Doctor, Khushru F.**

MCA and Certified Information Systems Auditor (CISA) | Gujarat University, Gujarat

#### **Garg, Gagan**

Ph.D. (Computer Science) Indian Institute of Science, Bangalore

#### **Jha, Sunita**

MTech (Biochemical Engineering & Biotechnology), IIT Delhi

#### **Krishnamurthi, G.**

PGDM | IIM Bangalore

#### **Kumbar, T. S.**

PhD (Library and Information Science) | Gulbarga University

### Areas of Interest

Organisational behaviour, economics, management

Business strategy and management

Marketing & finance

Rabindranath Sangeet

Project Management and Computer Security

Information theory, cryptography, number theory

Biochemistry & Biotechnology

Project management, management and agribusiness

Technical Communication

<b>Parikh, Margie</b> PhD	Management and Organization Theory
<b>Patel, Bhavesh</b> Master in Communication Design   DA-IICT	Photography
<b>Patel, Narendra</b> Diploma in Visual Communication   National Institute of Design, Ahmedabad	Animation
<b>Purohit, Nikunj</b> MCA, Saurashtra University	Project management, software development
<b>Raje, Nitin</b> PhD (Advanced Building Systems)	Carnegie Mellon University, USA Computer games, computer graphics, image processing, GIS
<b>Rangwala, Tanvi</b> MS (University of Southern California), USA	Computer Science, entrepreneurship
<b>Rao, U. T.</b> MBA (Finance)   Berhampur University	Business finance
<b>Raval, Nikhil</b> MBA (Strategic Management)   California State University, USA	Business management, strategy and finance
<b>Roy, Sukanto</b> PG Diploma in Communication Design, National Institute of Design, Ahmedabad	User centered design
<b>Sengupta, Amit</b> MBBS, MD (OBS-GYN), PhD, Biomedical Engineering, IIT Delhi MROGS (ROM)	Medical electronics, instrumentation, imaging, affordable technology, woman's health
<b>Trivedi, Bhushan</b> PhD (Computer Science)	Hemchandracharya North Gujarat University Algorithms and data structures
<b>Trivedi, Jigish</b> MTech (ICT)   DA-IICT	Information systems modeling, Strategic management, problem solving techniques
<b>Yagnik, Jignasu</b> MBA Gujarat University	Management Information System



## Annexure 4

### LISTING OF STAFF MEMBERS

#### Registrar

Soman Nair, Executive Registrar

#### Administration & HR

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

#### Accounts

Geeta Mehta, Chief Accounts Officer  
Santosh Pandit, Account Assistant

#### Director/Dean/Faculty Offices

Venugopal PR, Secretary to Director  
Satyabir Singh, Secretary to Dean - AP  
Mukesh Thaker, Secretary to Dean - R & D  
Deepa Poduval, Secretary, Faculty Block 2  
Geeta S Nair, Secretary, Faculty Block 4

#### Academic Programs

Jigar P Yagnik, Deputy Registrar (Academic)  
Jalpesh Pandya, Assistant Registrar (Academic)  
Dinesh S Prajapati, Senior Programmer  
Sangita Karia, Secretary, Registrar's Office  
Abhilash Kumar Bhaskaran, Academic Assistant

#### Placement & Continuing Education Programme (CEP)

Anjali Kulshrestha, Placement and CEP Officer  
Anuradha Srivastava, Secretary

#### Resources Centre

Satish Deshpande, Consulting Librarian  
Prasanna Kumar Muduli, Jr Prof Assistant  
Saurabh Prajapati, Jr Prof Assistant  
A Rajakumar, Jr Prof Assistant  
Shashikumar A A, Jr Prof. Assistant  
Surendra Kumar Soni, Library Trainee  
Hardik Vanik, Library Trainee  
Hiren Prajapati, Library Trainee  
Manish Goswami, Library Attendant

#### Computer Systems

Nimesh B Patel, System Engineer  
Prabhunath Sharma, Model Maker

#### Laboratory

Rajendra B Shah, Lab Superintendent  
Ramesh Prajapati, Laboratory Assistant  
Krupa V Pandya, Laboratory Assistant  
Sanjay Bariya, Laboratory Assistant  
Suryakant Goswami, Laboratory Assistant  
Krunal G Patel, Laboratory Assistant  
Firoja Sheikh, Laboratory Assistant  
Bhargav Patel, Laboratory Assistant  
Naresh J Patel, Laboratory Assistant

#### Centre for Entrepreneurship and Incubation

Alpesh Sathwara, IT Manager (*Assigned from CEI Project*)

#### Sports

D S Karmyal, Sports Officer  
Shirish Varma, Sports Assistant

#### Hostels

Jitendra Parmar, Hostel Supervisor  
Sawankumar Sachaniya, Hostel Supervisor

## Project Staff

1. Abhishek Shah, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor: Prof Prasenjit Majumder]
2. Abhishek Shukla, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor: Prof Anil Roy]
3. Akshat Garg, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor : Prof Anil Roy]
4. Ankur Undhad, Project Personnel Category - B (DPGPE sponsored project wef 15 May 2013) [Supervisor : Prof Hemant Patil]
5. Anusha Pathak, Senior Research Fellow (DDHIB sponsored project wef 1 June 2013) [Supervisor : Prof Vijaykumar Chakka]
6. Ashish Phophalia, Research Associate (TRFRPV sponsored project wef 4 January 2013) [Supervisor : Prof Suman K Mitra]
7. Bhargav Kanakiya, Part Time Research Assistant (DPGPE2 sponsored project wef 17 January 2013) [Supervisor : Prof Hemant Patil]
8. Biman Gujral, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
9. Dharak Shah, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
10. Dharak Shah, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
11. Ishan Jain, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
12. Komal Agrawal, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
13. Krutarth Patel, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor: Prof Anil Roy]
14. Lakshmipriya V K., Junior Research Fellow (IDHHII sponsored project wef 15 May 2013) [Supervisor : Prof M V Joshi]
15. Madhuresh Mishra, Junior Research Fellow (SOASD sponsored project wef 10 October 2012) [Supervisor : Prof Sanjay Chaudhary]
16. Mansi Gokhle, Part Time Research Assistant (DPGPE2 sponsored project wef 4 February 2013) [Supervisor : Prof Hemant Patil]
17. Mohit Bharaney, Project Assistant (VAGT sponsored project wef 1 March 2013) [Supervisor : Prof Anil Roy]
18. Neel Shah, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
19. Pankaj Dhalvaniya, Junior Research Fellow (DAISH sponsored project wef 26 November 2012) [Supervisor : Prof Subhajit Sen]
20. Pratik Jain, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
21. Priyal Jain, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor : Prof Anil Roy]
22. Priyank Bharad, Project Assistant (VAGT sponsored project wef 1 March 2013) [Supervisor : Prof Anil Roy]
23. Purvi Koringa, Senior Research Fellow (TRFRPV sponsored project wef 12 June 2013) [Supervisor : Prof Suman K Mitra]
24. Rohan Kohli, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor : Prof Anil Roy]
25. Rohan Nagrani, Junior Research Fellow (SOASD sponsored project wef 22 January 2013) [Supervisor : Prof Sanjay Chaudhary]
26. S Nivedita, Junior Research Fellow (DDHIB sponsored project wef 1 June 2013) [Supervisor : Prof. Vijaykumar Chakka]



27. Shirish D Jadav, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor : Prof Anil Roy]
28. Shubham Sharma, Project Personnel Category - B (DPGPE sponsored project wef 15 May, 2013) [Supervisor : Prof Hemant Patil]
29. Srishti Gupta, Project Assistant (VAGT sponsored project wef 1 March 2013) [Supervisor : Prof Anil Roy]
30. Tarunima Prabhakar, Part Time Research Assistant (DPGPE2 sponsored project wef 17 January 2013) [Supervisor : Prof Hemant Patil]
31. Varanasi Aswin Ram, Project Assistant (VAGT sponsored project wef 1 June 2013) [Supervisor : Prof Anil Roy]
32. Vipul Garg, Part Time Research Assistant (CLIA sponsored project wef 15 May 2013) [Supervisor : Prof Prasenjit Majumder]
33. Yashesh Gaur, Part Time Research Assistant (DPGPE2 sponsored project wef 17 January 2013) [Supervisor : Prof Hemant Patil]

Annual Report Committee

Prof Anish Mathuria | Prof Sanjeev Gupta | Prof B N Hiremath | Mr Satish Deshpande | Prof Suman Mitra | Prof Madhumita Mazumdar | Ms Anjali Kulshrestha | Mr Soman Nair

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