

2009-10

**YEARLY REPORT OF  
IIT-DELHI**



**Prof. Pankaj Jalote, Director**  
Indraprastha Institute of Information Technology, Delhi  
10/11/2010

## Introduction

Indraprastha Institute of Information Technology is a research-led Institute of higher education, with a strong focus on Research and Development. It was created by an Act by Govt of Delhi as a fully empowered State University. Its scope is research and teaching in Information Technology and Allied Areas. It started its BTech (IT) program in 2008, PhD program in 2009, and its MTech program in 2010.

IIIT-Delhi is an autonomous Institute, with its Board (current Chairman: Mr. Kiran Karnik, ex-President, Nasscom) fully empowered to take all important decisions, including starting of academic programs, and intake in the programs. For academic programs, the Board is advised by the Institute's Senate. Hence, for starting any degree program, or enhancing the intake, the Institute is fully empowered and its own internal mechanisms do the due diligence. Though Institute does not require any approval from AICTE or UGC for number of seats, starting of programs, recruitment criteria, etc., UGC has already recognized it as a State University [http://www.ugc.ac.in/inside/pub\\_notice\\_satatadd.pdf](http://www.ugc.ac.in/inside/pub_notice_satatadd.pdf) and AICTE has also recognized IIIT-D as an Institute of National Importance as well as a State University <http://www.aicte-india.org/einp.htm>.

The Institute's Vision statement is: To be a world-class R&D-led institute of higher education in IT and allied areas which is:

- Globally respected for research and education
- Thriving UG and PG programs
- Linked globally, Industry-facing, socially relevant

Being research-led, R&D is the main focus area for the Institute. To enhance R&D, the Institute has been following the approach of building strong Research groups in different areas. That is, when the Institute enters an area, it plans to recruit multiple faculty members in that area to build a strong group. The goal is that any research group started in the Institute should aim to become within the top three groups in the country within three years. As research groups gain strength, they are expected to start specialized MTech programs, while continuing the PhD program.

Within the next two years, as the Institute has developed reasonable strength in the areas of Mobile Computing and Data Management, it plans to start MTech programs in these areas, as well as strengthen and expand its MTech in Information Security. That is, for MTech programs, the objectives are:

- Start MTech in Data Management, 2011, intake: 20
- Start MTech in Mobile Computing, 2012, intake: 20
- Enhance MTech program in Information Security, increase intake to 30

The institute already has a strong PhD program – it was able to attract 7 PhD scholars in 2009 (the first year of its program), and 8 in 2010. Some of these scholars are among the top performers in their UG program. The Institute wants to give a big push to the PhD program, as it believes that while there are many colleges that can offer UG programs very few have the capability of offering strong PhD (and MTech) programs. And it is well recognized that there is an acute shortage of PhDs in the country, which is hurting the R&D efforts as well as academics in India. The Institute has shown that it can attract good faculty, which in turn attract good PhD scholars – this also the Institute has demonstrated. So, another objective for the proposal is:

Rapidly expand the PhD (Computer Science) program, and enhance our collaborative PhD program further

## YEARLY REPORT 2009 – 10

Most academic matters cover the period till July 31, 2010.

For finances, the financial year is used (April 1 to March 31, 2010).

While the appendices contain the details for this year, in the summary tables, the numbers for the past few years are also given as ready reference.

### Students

Year	B Tech (IT)				
	Avg XII %	Admitted	Graduated	Left	Total
2008-09	82.5	60	0	5	55
2009-10	82.7	65	0	4	61
2010-11	85.1	97	0	9	88

Year	PhD (CS)				M Tech			
	Admitted	Graduated	Left	Total	Admitted	Graduated	Left	Total
2009-10	8	0	1	7	0	0		0
2010-11	9	0	0	16	23	3		20

### Student Achievements

- Number of papers authored by Phd students: 3
- Number of papers authored by B Tech students: 2
- Number of programs organized by ACM Students Chapter: 3
- List of all the papers authored by Phd and B Tech students, and the ACM Chapter organized are given in **Appendix 1**

### Placements and Internships

PLACEMENTS – B TECH (IT)						
Year	Number of applicants	No placed	No of jobs	No of Schools	Highest Pay	Average Pay

INTERNSHIPS				
Year	In IIIT-Delhi	In India	Abroad	Total Internship
2010-2011	48	8	Nil	56

- List of internships students did is given in **Appendix 2**

### Courses Taught

Year	Number of Courses Taught			
	CS / IT	Maths	HSS	Others
2008-09	7	--	1	1
2009-10	6	--	2	3
2010-11	--	--	--	--

- List of courses taught, semester-wise, is given in **Appendix 3**

#### Research and Development

Year	No of Papers	No of conferences attended	No of books	Total no of citations	No of seminars given outside	Awards
2008-09	--	--	--	--	--	--
2009-10	11	5	--	--	--	6
2010-11	18	5	--	--	--	1

#### Research and Development

Year	No of Technologies	No of R&D projects	Value of R&D projects (Rs. in lacs)	No of Consultancy Projects	Value of Consultancy Projects (Rs. in lacs)
2008-09	--	--	29.89	1	3.60
2009-10	2	14	519.43	2	6.33

- List of publications published is given in **Appendix 4**
- List of projects is given in **Appendix 5**
- List of conferences attended by faculty and students given in **Appendix 6**
- List of technologies, their adoptions, etc is given in **Appendix 7**
- List of awards given in **Appendix 8**

#### Continuing Education and Outreach

OUTREACH		
Year	Total programs	Total attendance
2008-09	--	--
2009-10	11	11

- List of students from outside who entered at IIIT-Delhi in summer 2010 is given in **Appendix 9**

#### Financials

INCOME		
Year	2008 – 2009	2009 – 2010
Government Grant	150,000,000	150,000,000
Fees	5,024,600	10,194,400
R & D Grants	3,349,507	15,452,901
Donations	0	4,893,889
Interest	4,066,399	16,581,608
Miscellaneous	37,500	1,897,214
Total	162,478,006	199,020,012

\* List of donations is placed in **Appendix 10**

EXPENSES		
Year	2008 – 2009	2009 – 2010
Salaries	960,248	14,566,554
Scholarships	225,000	225,000
Capital	4,788,500	24,967,741
Services	2,545,133	6,793,905
Consumables	231,550	789,084
Miscellaneous	3,140,977	5,357,349
Total	11,891,408	52,699,633

\* Statement of each of the 4 A/c – Loan, Main, R&D, and Corpus is placed **Appendix 11**

**Establishment**

MANPOWER						
	FACULTY			STAFF		
Year	Added	Left	Total	Added	Left	Total
08-09	07	Nil	07	2	Nil	2
09-10	07	Nil	07	5	1	4
10-11	03	Nil	03	2	Nil	2
	<b>Total</b>		<b>17</b>	<b>Total</b>		<b>8</b>

PHYSICAL / LAND ASSETS				
	AREAS (SQM)		LAND (ACERS)	
Year	Added	Total	Added	Total
08-09	2,918	--	25	25
09-10	76	2,994	--	--

BOOKS		
Year	2008-09	2009-10
Added	0	142
Gone	0	0
Total	0	142

IT ASSETS			
Items	2008 – 2009	2009 – 2010	Totals
No. of Servers	1	0	1
No. of Laptops	2	17	19
No. of Desktops	68	0	68
No. of Data cards	--	7	7
No. of Printers	7	16	23
No. of Clients in UPS	2 (10 KVA)	1 (20 KVA)	3
Total Bandwidth	1 Mbps	1 Mbps	2
No. of Projectors	1	2	3
No. of clients in Labs	68	0	68
Total Network Traffic	NA	NA	NA
No. of Scanner	--	2	2

CONSUMPTION				
Year	Power	Water / Sanitation	Oil / Diesel	Printing / Stationary
08-09	27,575	128,000	--	98,705
09-10	593,602	204,000	7524	283,962

- Details about faculty adding/leaving and staff adding/leaving in **Appendix 12**
- Details about new buildings/area/land added given in **Appendix 13**



## APPENDIX I

PUBLICATIONS BY STUDENTS			
Sl. No.	Title of paper	Authors	Conference
1	Polarity Classification of Subjective Words Using Common-Sense Knowledge-Base	A Sureka, V Goyal, D Correa, and A Mondal	12th Intl Conf on Fuzzy Sets, Data Mining & Granular Computing (RSFDGrC'09) Dec 15-18, 2009
2	Generating Domain-Specific Ontology from Common-Sense Semantic Network for Target-Specific Sentiment Analysis	A Sureka, V Goyal, D Correa, & A Mondal	5th International Conference of the Global WordNet Association (GWC-2010). January 31-February, 2010. Mumbai.
3	An Efficient Access Control Scheme for Keyword-Based Search over RDBMS	V Goyal, A Sureka & S Lal	Databases in Networked Information Systems (DNIS-2010)
4	On Analysis of Rural and Urban Indian Fingerprint Images	C. Puri, K. Narang, A. Tiwari, M. Vatsa, and R. Singh	ICEB 2010 Springer LNCS, Vol. 6005, pages: 55-61
5	Fingerprint Recognition: Machine vs. Human	Charvi Puri, Kanika Narang, Mayank Vatsa, & Richa Singh	IBM IRL Research Paper/Poster presentation
PROGRAMS ORGANIZED THROUGH ACM			
Sl. No.	Type of activity	Brief Description	Date of activity
1	Outreach	Workshop on Cloud Computing by Dr. Chandu Thekkath from Microsoft Research	Jan 01, 2010
2	Workshop	An introductory Mobile Computing Workshop was conducted by the PhD students to give a brief knowledge of mobile application development on various platforms such as Symbian and Android	Mar 27, 2010
3	Workshop	Workshop gave an overview of open source telemedicine platform called Sana, workshop provided a deep technical detail of technologies involved in Sana, and will also give users hand-on experience on developing modules in Sana. This was conducted by RJ Ryan from MIT.	July 05, 2010

## APPENDIX II

INTERNSHIP IN IIIT-D					
Sl. No.	Name of Student	Institute	Project Name	Duration	Sponsor
1.	Ankit Kadam	IIIT Delhi	Installing and comparing different mHealth applications	May 3 - July 16	Nokia
2..	Tanmay	IIIT Delhi	Installing and comparing different mHealth applications	May 3 - July 16	Nokia
3.	Bhanu Verma	IIIT Delhi	Routing the voice call made from a phone through a computer in the middle	May 3 - July 16	Nokia
4.	Nikhil Shekhawat	IIIT Delhi	Routing the voice call made from a phone through a computer in the middle	May 3 - July 16	Nokia
5.	Priyanshi Mittal	IIIT Delhi	SMS gateway interface for healthcare applications	May 3 - July 16	Nokia
6.	Dheeraj	IIIT Delhi	External device interface with mobile phone over bluetooth/USB	May 3 - July 16	Nokia
7.	Daksha	IIIT Delhi	Symbian client interface for healthcare applications	May 3 - July 16	IIIT-D
8.	Apurv Mehra	IIIT Delhi	Symbian client interface for healthcare applications	May 3 - July 16	IIIT-D
9.	Rushil	IIIT Delhi	Symbian client interface for healthcare applications	May 3 - July 16	IIIT-D
10.	Sanchit	IIIT Delhi	Symbian client interface for healthcare applications	May 3 - July 16	IIIT-D
11.	Aman Sahni	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
12.	Ashish	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
13.	Stuti	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
14.	Gaurav Saluja	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D

## APPENDIX II (Contnd.)

INTERNSHIP IN IIIT-D					
Sl. No.	Name of Student	Institute	Project Name	Duration	Sponsor
16.	Aman Gupta	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
17.	Gaurav	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
18.	Rohit Kishore	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
19.	Siddharth	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
20.	Pratyush Tripathi	IIIT Delhi	Application for routing through Public transport	May 3 - July 16	IIIT-D
21.	Akshit Nanda	IIIT Delhi	RightFare	May 3 - July 16	IIIT-D
22.	Lakshay Pandey	IIIT Delhi	RightFare	May 3 - July 16	IIIT-D
23.	Naved Alam	IIIT Delhi	RightFare	May 3 - July 16	IIIT-D
24.	Saloni Jain	IIIT Delhi	RightFare	May 3 - July 16	IIIT-D
25.	Naman Kohli	IIIT Delhi	Learning Algorithms in TOC	May 1- Jun 30	MSR-RX
26.	Pratyakash Gupta	IIIT Delhi	Video Analysis	Apr 15 - July 1	MSR-RX
27.	Arun Singh	IIIT Delhi	System Administration	May 1- July 30	IIIT-D
28.	Sandeep Pathak	IIIT Delhi	System Administration	May 1 - July 30	IIIT-D
29.	Raghav Sethi	IIIT Delhi	Open Source Intelligence	Jul 1-Jul 25	DIT
30.	Swetank Kumar	IIIT Delhi	Blogosphere	Jul 1-Jul 25	DIT
31.	Tarang Chugh	IIIT Delhi	Blogosphere	Jul 1-Jul 25	DIT
32.	Vani Sivasankar	IIIT Delhi	Pedohphile	Jul 1- Jul 25	DIT
33.	Varun Gandhi	IIIT Delhi	Open Source Intelligence	Jul 1-Jul 25	DIT
34.	Aastha Nigam	IIIT Delhi	Terrorist Organizations in India	Jul 1-Jul 25	DIT
35.	Atul Goyal	IIIT Delhi	You Tube	Jul 1-Jul 25	DIT
36.	Hemank Lamba	IIIT Delhi	Open Source Intelligence	Jul 1-Jul 25	DI
37.	Kanika Narang	IIIT Delhi	Terrorist Organizations in India	Jul 1- Jul 25	DIT
38.	Manish	IIIT Delhi	You Tube	Jul 1-Jul 25	DIT
39.	Prateek Gaur	IIIT Delhi	Pedohphile	Jul 1- Jul 25	DIT
40.	Tuhinanshu	IIIT Delhi	Pedohphile	Jul 1-Jul 25	DIT
41.	Vibhas Chabra	IIIT Delhi	You Tube	Jul 1-Jul 25	DIT
42.	Amar Prakash	IIIT Delhi	Video Authentication	Jul 1- Jul 25	DIT
43.	Ankit Sarkar	IIIT Delhi	Face CAPTCHA	Jul 1- Jul 25	DIT
44.	Charvi Puri	IIIT Delhi	Video Authentication	Jul 1- Jul 25	DIT
45.	Gaurav Goswami	IIIT Delhi	Face CAPTCHA	Jul 1- Jul 25	DIT
46.	Rajat Singh	IIIT Delhi	Video Authentication	Jul 1- Jul 25	DIT
47.	Shrey Jairath	IIIT Delhi	Face Recognition from Surveillance Videos	Jul 1- Jul 25	DIT
48.	Saurav Maitra	IIIT Delhi	Video Authentication	Jul 1-Jul 25	DIT
49.	Yash Seth	IIIT Delhi	Video Authentication	Jul 1- Jul 25	DIT

INTERNSHIP IN INDIA					
Sl. No.	Name of Student	Organization	Project Name	Duration	Stipend
1	Sunpreet Singh Arora	Nokia India Pvt Ltd, Bangalore	1. FreOffice Editor, 2. DICOM SR plugin for Koffice, 3. Web Office Suite	2.5 Months	20000
2	Sandeep Pathak	North Delhi Power Ltd. (NDPL)	S/W on Online Meeting Booking Room	3 Months	NIL
3	Lakshay Ahuja	National Informatics Center(NIC)	Online Application of General Stores	11 Weeks	5000
4	Sumit Arora	TCS	Understanding and Applying Blackboard Architecture	10 Weeks	NIL
5	Arjun	Nokia India Pvt Ltd, Bangalore	1. FreOffice Editor, 2. DICOM SR plugin for Koffice, 3. Web Office Suite	2.5 Months	20000
6	Shashwat Goel	Mathematical Sciences Foundation (MSF)	Face Detection, Recognition and Matching	1 Month	5000
7	Avineet Kaur	North Delhi Power Ltd. (NDPL)	S/W on Online Meeting Booking Room	6 Weeks	NIL
8	Tanushree Mishra	Aricent	Made a data structure for storing DNS server queries in C language	2 Months	NIL

APPENDIX III

ACADEMIC YEAR 2008-09			
MONSOON SEMESTER		WINTER SEMESTER	
B.Tech. 2008 batch		B.Tech. 2008 batch	
Semester-I		Semester-II	
1	Communication Skills	1	Computer Organisation
2	Digital Circuits	2	Data Structures & Algorithm
3	Discrete Mathematics	3	Humanity and Social Science (T&S)
4	Introduction to Programming	4	System Management
		5	Theory of Computation

**Summer Term (2009):**

1. Data Structures & Algorithm
2. Theory of Computation

ACADEMIC YEAR 2009-10 MONSOON SEMESTER			
B.Tech. 2008 batch		B.Tech. 2009 batch	
Semester-III		Semester-I	
1	Advanced Programming	1	Communication Skills
2	Critical Reading	2	Digital Circuits
3	Operating Systems	3	Discrete Mathematics
4	Probability and Statistics	4	Introduction to Programming
5	Transducer and Signal Conditioning		

WINTER SEMESTER			
B.Tech. 2008 batch		B.Tech. 2009 batch	
Semester-IV		Semester-II	
1	Algorithm Design & Analysis	1	Computer Organization
2	Computer Network	2	Data Structures & Algorithm
3	Database and SQL	3	System Management
4	Digital Communication	4	Theory of Computation
5	Humanity and Social Science (RM/POK)	5	Humanity and Social Science (T&S/RM/POK)



ACADEMIC YEAR 2010-11 MONSOON SEMESTER			
B.Tech. 2009 batch		B.Tech. 2010 batch	
Semester-III		Semester-I	
1	Advanced Programming	1	Communication Skills
2	Critical Reading	2	Digital Circuits
3	Operating Systems	3	Discrete Mathematics
4	Probability and Statistics	4	Introduction to Programming
5	Advanced Calculus and Linear Algebra	5	System Management

APPENDIX IV

## LIST OF PUBLICATIONS

### JOURNAL PUBLICATIONS

1. R. Singh, M. Vatsa, A. Ross, and A. Noore, Biometric Classifier Update using Online Learning: A Case Study in Near Infrared Face Verification, Image and Vision Computing, Vol. 28, No. 7, July 2010, pp. 1098 - 1105, 2010
2. Anand Gupta, Shyam K.Gupta, Isha M.G., Pankhuri Gupta, Vikram Goyal and Sangeeta Sabharwal: "Opacity Characteristic of Context Honeypot System", Journal of Information Security: A Global Perspective, Volume 19, Issue 3 2010, pages 142-152.
3. Anirban Mondal, Sanjay Kumar Madria and Masaru Kitsuregawa "E-ARL: An Economic Incentive scheme for Adaptive Revenue-Load-based dynamic replication of data in Mobile-P2P networks" To appear in the Journal on Distributed and Parallel Databases -- DAPD Journal 2010
4. Kumaraguru P, Sheng S, Acquisti A, Cranor L, and Hong J, "Teaching Johnny Not to Fall for Phish". Association for Computing Machinery's Transactions on Internet Technology (TOIT), Volume 10, Issue 2, May 2010
5. M. Vatsa, R. Singh, A. Noore, and S.K. Singh, Combining Pores and Ridge Features for Improved Fingerprint Verification, Signal Processing, Vol. 89, No. 12, pp. 2676 – 2685, 2009
6. Anirban Mondal, Sanjay Kumar Madria and Masaru Kitsuregawa "An Economic Incentive Model for encouraging Peer Collaboration in Mobile-P2P networks with support for constraint queries" International Journal on Peer-to-Peer Networking and Applications 2(3) – PPNA Journal 2009
7. Anirban Mondal, Sanjay Kumar Madria and Masaru Kitsuregawa "A Collaborative Replication approach for Mobile-P2P networks" International Journal on Handheld Computing 2009

### CONFERENCES PUBLICATIONS

1. C. Puri, K. Narang, A. Tiwari, M. Vatsa, and R. Singh, On Analysis of Rural and Urban Indian Fingerprint Images, In Proceedings of International Conference on Ethics and Policy of Biometrics and International Data Sharing, 2010 in Hong Kong
2. H.S. Bhatt, S. Bharadwaj, R. Singh, and M. Vatsa, Face Recognition and Plastic Surgery: Social, Ethical and Engineering Challenges, In Proceedings of International Conference on Ethics and Policy of Biometrics and International Data Sharing, 2010 in Hong Kong
3. V Goyal, A Sureka, and S Lal, "AccKW: An Efficient Access Control Scheme for Keyword-based Search over RDBMS", Proceedings of Databases in Networked Information Systems, DNIS 2010 in Japan
4. A Sureka, V Goyal, D Correa, and A Mondal, "Generating Domain-Specific Ontology from Common-sense Semantic Network for Target-specific Sentiment Analysis" International Conference of the Global Word Net Association GWC 2010 in Mumbai, India
5. A Mondal, K Yadav, S K Madria "EcoBroker: An Economic Incentive-Based Brokerage Model for Efficiently Handling Multiple-Item Queries to Improve Data Availability via Replication in Mobile-P2P Networks" Proceedings of Databases in Networked Information Systems – DNIS 2010 in Japan
6. A Singh, F Ramos, Durrant-Whyte H. and W Kaiser, "Modeling and decision making in spati-temporal processes for environmental surveillance", Poster session in Workshop on Towards Closing the Loop: Active Learning for Robotics, Robotic Science and Systems (RSS), 2010
7. K Yadav, V Naik, A Singh, P Singh, P Kumaraguru, U Chandra, "Challenges and Novelties while using Mobile Phones as ICT Devices for Indian Masses", 4th ACM Workshop on Networked Systems for Developing Regions (NSDR) (With Mobisys, 2010) in USA

8. A Singh, F Ramos, Durrant-Whyte H. and W Kaiser, "Modeling and decision making in spati-temporal processes for environmental surveillance" IEEE International Conference on Robotics and Automation (ICRA), 2010, Anchorage, Alaska
9. I Ion, M Langheinrich, P Kumaraguru, and S Capkun, "Influence of User Perception, Security Needs, and Social Factors on Device Pairing Method Choices". Accepted at Symposium on Usable Privacy and Security, 2010
10. S Sheng, M Holbrook, P Kumaraguru, L Cranor, and J Downs, "Who Falls for Phish" A Demographic Analysis of Phishing Susceptibility and Effectiveness of Interventions at CHI 2010.
11. H Rengamani, P Kumaraguru, R Chakraborty, and R Rao, "The Unique Identification Number Project: Challenges and Recommendations". Accepted at The Third International Conference on Ethics and Policy of Biometrics and International Data Sharing (ICEB), 2010.
12. P. Kumaraguru, S Upadhyaya, and R Rao, "Protecting senior citizens from cyber security attacks in the e-health scenario", at 6th Annual Cyber Security and Information Intelligence Research Workshop (CSIIRW), Oakridge, TN (2010).
13. S. Nagaraj, "The impact of unlinkability on adversarial community detection: effects and counter measures", Privacy Enhancing Technologies Symposium, in July 2010 at Berlin.
14. S. Nagaraj, "Graphsplicer: detecting botnets using structured graph analysis", at the International Conference in Distributed Computing Systems, at Genova in June, 2010
15. M. Vatsa, R. Singh, and A. Noore, Context Switching Algorithm for Selective Multibiometric Fusion. In Proceedings of International Conference on Pattern Recognition and Machine Intelligence, pp. 452-457, 2009 in India
16. R. Singh, M. Vatsa, A. Ross, and A. Noore, Online Learning in Biometrics: A Case Study in Face Classifier Update, In Proceedings of IEEE International Conference on Biometrics: Theory, Applications and Systems, 2009 in USA
17. M. Vatsa, R. Singh, A. Noore, and K. Morris, Simultaneous Latent Fingerprint Recognition: A Preliminary Study, In Proceedings of IEEE International Conference on Biometrics: Theory, Applications and Systems, 2009 in USA
18. R. Singh, M. Vatsa, and A. Noore, Effect of Plastic Surgery on Face Recognition: A Preliminary Study, In Proceedings of IEEE Computer Society Workshop on Biometrics at Computer Vision and Pattern Recognition Conference, 2009 in USA
19. M. Vatsa, R. Singh, and A. Noore, Fingerprint Indexing using Minutiae and Pore Features, In Proceedings of International Conference on Image Processing, Computer Vision and Pattern Recognition Conference, 2009 in USA
20. R. Singh, M. Vatsa, and A. Noore, Denoising and Segmentation of 3D Brain Images, In Proceedings of Image Processing, Computer Vision and Pattern Recognition Conference, 2009 in USA
21. Ashish Sureka, Vikram Goyal, Denzil Correa, and Anirban Mondal, "Polarity classification of Subjective Words Using Common-Sense Knowledge-Base" International Conference on Fuzzy Sets, Data Mining & Granular Computing RSFDGrC 2009 in India
22. Dongxiang Zhang, Yeow Meng Chee, Anirban Mondal, Anthony Tung and Masaru Kitsuregawa "Keyword search in spatial databases" Proceedings of the International Conference on Data Engineering -- ICDE 2009.

## APPENDIX V

## LIST OF PROJECTS

Sl. No.	Project Title	Granting Agency	Funding Amount	Principal Investigator
1	Research and Design of face Recognition Algorithms for face Images with Variations in pose, Illumination and Expression	Dept of Information Technology	INR 87,50,000	Mayank Vatsa Richa Singh
2	Analyzing quality of fingerprint images for Indian population	UIDAI	INR 12,50,000	Mayank Vatsa Richa Singh
3	Analyzing online content using data mining techniques to counter Cyber Crime	Dept of Information Technology	INR 81,50,000	PK / Ashish Sureka
4	Research in location-based services in Indi	Nokia Research Centre, Palo Alto USA	INR 545,975	Vinayak
5	Set up a Nokia Lab at IISc and IIIT-D	Nokia Research Centre	Euro 40,000 (INR 27,54,988)	Vinayak
6	Work on the problems localization using mobile phones	Nokia Research Centre, Palo Alto USA	USD 50,000 (INR 23,11,249)	Vinayak
7	Wireless Structural Health Monitoring of Impact Damage and Vibration in Spacecraft Structures	ISRO-IISc Space Technology Cell	INR 10,00,000	Vinayak
8	Process Review and Re-engineering	IFFCO Kisan Sanchar Limited	INR 450,000	Vinayak / Amarjeet / Pushpendra
9	Privacy in India	Intl Dev Research Centre, Canada & Privacy Intl, UK	INR 17,94,246	Ponnurangam Kumaraguru
10	Video analysis for law enforcement and intelligence agencies	Palladion, Intelligence & Security Informatics	INR 13,00,000	Ponnurangam Kumaraguru
11	Obtained travel and participation grant to attend Terrorism & New Media: Building a Research Network in Dublin City University		INR 60,510	Ponnurangam Kumaraguru
12	Review of their existing system, recommendations for technology advancements for scaling up the operations, developing the software requirements for efficiently managing their operations and prototyping and piloting a new technology for exploring new services in this domain	IFFCO Kisan Sanchar Limited	INR 490,000	Pushpendra Singh
13	Reengineering existing applications for the Multicore servers	Dept of Science and Technology	INR 31,76,000	Pankaj Jalote
14	Statistical Evaluation and Recognition of Simultaneous Latent Fingerprint Impressions	Dept of Science & Technology	INR 558,000	Mayank Vatsa Richa Singh
15	Building a CMM like model for assessing the maturity of E-Governance	NISG	INR 720,000	Pankaj Jalote
16	Rapidly developing software using globally distributed teams	SAP Labs	INR 1,100,000	Pankaj Jalote
17	Grant for research in computer sciences	Microsoft	INR 420,000	Pankaj Jalote
18	Microsoft/CSE/20040029 Microsoft/CSE/20040052	Microsoft	INR 1,849,507	Pankaj Jalote
	Botnet defenses for enterprises networks	DRDO	INR 1,000,000	Shishir Nagaraj

### CONSULTANCY PROJECTS

Sl. No.	Project Title	Granting Agency	Funding Amount	Principal Investigator
1	Consulting IFFCO Kisan Sanchar Limited for voice based value added services for farmer	IKSL	INR 153,033	Amarjeet Singh
2	Advisory services for educational initiatives	NASSCOM	INR 360,000	Pankaj Jalote
3	For consultancy and training	System Consultant	INR 480,000	Pankaj Jalote

APPENDIX VI

### NATIONAL AND INTERNATIONAL CONFERENCES ATTENDED

1. M. Vatsa, R. Singh attended an International Conference on Ethics and Policy of Biometrics and International Data Sharing, 2010 in Hong Kong
2. Ashish Sureka attended an International Conference of the Global Word Net Association GWC 2010 in Mumbai, India
3. Amarjeet Singh attended an IEEE International Conference on Robotics and Automation (ICRA), 2010, Anchorage, Alaska
4. P. Jalote attended an IEEE International Conference on Software Engineering in 2010, Bangalore, India
5. P. Jalote attended an International Conference of Software Engineering (ICSE), in May 2010, Cape Town, South Africa.
6. M. Vatsa, R. Singh, attend an International Conference on Pattern Recognition and Machine Intelligence, pp. 452-457, 2009 in India
7. R. Singh, M. Vatsa, attend an IEEE International Conference on Biometrics: Theory, Applications and Systems, 2009 in USA
8. R. Singh, M. Vatsa, attend an IEEE Computer Society Workshop on Biometrics at Computer Vision and Pattern Recognition Conference, 2009 in USA
9. P. Jalote attended an IEEE International Symposium on Software Reliability Engineering in 2009 in Mysore, India
10. P. Jalote attended an International Conference on PAN-IIT in 2009, in Chicago, USA

APPENDIX VII

### LIST OF TECHNOLOGIES & THEIR ADOPTIONS

- Finding location of a mobile-phone user on his/her phone using Cell Broadcast Service (CBS) messages (GPS / WiFi is not necessary on the phone) – being transferred to Nokia for public use.
- A mobile-phone application to find DTC and Metro routes for Delhi – being transferred to DIMTS, Delhi for public use.

## LIST OF AWARDS

**Journal Paper listed 15th among Top 25 articles in Image and Vision Computing Journal between January – March 2009 (this list was available during July 2009 – September 2009)**

*R. Singh, M. Vatsa, and A. Noore, Face recognition with disguise and single gallery images, Image and Vision Computing Journal, vol.27, no. 3, pp. 245-257, 2009.*

**Journal Paper listed 18th among Top 25 articles in Image and Vision Computing Journal between January – March 2009 (this list was available during July 2009 – September 2009)**

*M. Vatsa, R. Singh, and A. Noore, Feature based RDWT watermarking for multimodal biometric system, Image and Vision Computing Journal, vol.27, no. 3, pp. 293-304, 2009.*

**Received Best Poster Award**

*R. Singh, M. Vatsa, A. Ross, and A. Noore, Online learning in biometrics: A case study in face classifier update, Proc. IEEE International Conference on Biometrics: Theory, Applications, and Systems (BTAS09), pp. 1-6, 2009.*

**Received Best Paper Award**

*M. Vatsa, R. Singh, A. Noore, and K. Morris, Simultaneous latent fingerprint recognition: A preliminary study, Proc. IEEE International Conference on Biometrics: Theory, Applications, and Systems (BTAS09), pp. 1-6, 2009.*

**IEEE Spectrum (September 2009)**

*An article in the September issue of the IEEE Spectrum featured our research on face recognition. The research results reports the effectiveness of existing face recognition algorithms especially when a person has undergone cosmetic facial plastic surgery.*

**97th Indian Science congress, Young Scientist Award held in Thiruvananthapuram from 3-7 January 2010**

*G. Gupta: "Development of methodology for Detection and Fixing of Physical Devices for Security and Forensic Applications"*

**Pankaj Jalote selected for SEIF Award 2010 (April 22, 2010)**

*Prof. Pankaj Jalote: Microsoft Research Software Engineering Innovation Foundation (SEIF) Awards 2010.*

INTERNSHIP IN IIIT-D					
Sl. No.	Name of Student	Institute	Project Name	Duration	Sponsor
1.	Aditya Goyal	LNMIT	External device interface with mobile phone over Bluetooth / USB	May 10 - July 31	MSR-RX
2.	Abhishek Bhardwaj	NSIT, Delhi	Duplex relay interface with mobile phone over audio port	June 1-July 31	MSR-RX
3.	Tanvi Jindal	IIT Roorkee	SMS gateway interface for healthcare applications	May 18-July 23	MSR-RX
4.	Roshan Shankar	NSIT, Delhi	Efficient Processing of Top-K Queries in Mobile P2P environments using Game-theoretic models.	1st May-30 July	IIIT - D
5.	Ashish Kumar	IIT-KGP	Cryptanalysis of Tav-128 hash function	1st May-30 Jun	MSR-RX
6.	Tanweer Alam	IIT-KGP	Cryptanalysis of Tav-128 hash function	1st May-30 Jun	MSR-RX
7.	Naveen Rai	BIT-Mesra	Analysis of a watermarking scheme	1st May-30 Jun	MSR-RX
8.	Amritesh	BIT-Mesra	Analysis of a watermarking scheme	1st May-30 Jun	MSR-RX
9.	Sidharth Chabra	DCE-Delhi	You Tube	1st Jul -25th Jul	DIT
10.	Ravi Dhingra	LMNIT	Terrorist Organizations in India	1st Jul -25th Jul	DIT
11.	Ayushi Rastogi	KIET	Software Bugs Mining	1st Jun -31 Jul	DIT



## APPENDIX X

## LIST OF DONATIONS

SI No	Particulars	2008-09	2009-10
1	Dr. A. R. Krishnamurthy Faculty Research Fellowship	--	1,000,000
2	Dr. T. V. Raman Pai Faculty Research Fellowship	--	1,000,000
3	Dr. S. D. Shibulal Research Travel Fund	--	1,000,000
	<b>TOTAL</b>	<b>--</b>	<b>3,000,000</b>

## APPENDIX XI

## PROVISIONAL STATEMENT SHOWING DETAIL OF FUNDS FLOW AS ON 31.03.2010

S.No	Type of Account	Revenue 2008-09	2009-10	Expenditure 2008-09	2009-10	Balance with Bank Account
1	Loan Account	153,704,458	156,877,601	8,927,803	21,657,156	279,997,100
2	Main Account	5,421,010	9,948,444	5,723,140	1,375,466	8,270,848
3	Entrance Test Account	-	1,048,730	-	155,710	893,020
4	R&D Account	3,330,006	15,567,551	22,532	13,584,102	5,290,923
5	Corpus Account	-	9,787,778			9,787,778
		<b>162,455,474</b>	<b>193,230,104</b>	<b>14,673,475</b>	<b>36,772,434</b>	<b>304,239,669</b>

## APPENDIX XII

## FACULTY AND STAFF ADDING / LEAVING

MANPOWER						
Year	FACULTY			STAFF		
	Added	Left	Total	Added	Left	Total
08-09	Prof. Pankaj Jalote Dr. Veena Bansal Dr. Astrid Kiehn Dr. Mayank Vatsa Dr. Richa Singh	Nil	05	Dr. Subramanian Sh. Sanjay Roy	Nil	2
09-10	Dr. Vikram Goyal Dr. Ponnurangam K. Dr. Ashish Sureka Dr. Anirban Mondal Dr. Pushpendra Dr. Vinayak S. Naik Dr. Amarjeet Singh Dr. Debajyoti Bera Dr. Gaurav Gupta Dr. Somitra	Nil	10	Mr. Vinod Mr. Anoop Mr. Arun Mr. Jothibas Mr. Vivek	Dr. Subramanian	4
10-11	Dr. Saket Dr. Shishir Dr. Subhasis	Nil	03	Ms. Anuradha Mr. Ashwani Kansal	Nil	2
	<b>Total</b>		<b>18</b>	<b>Total</b>		<b>8</b>

## APPENDIX XIII

## DETAILS OF AREAS

Floor area at NSIT Transit Campus		
Year	II Floor	III Floor
2008-09	778.41 sqm	2140.57 sqm
2009-10	76 sqm	--

## Land Area:

Area allocated from GB Pant Polytechnic at Okhla Phase III New Delhi is: **25 Acres**



**Address:**  
<http://www.iiitd.ac.in>