



Sir Padampat Singhania University  
National Conference on ICT: Theory, Applications & Practices  
March 5-6, 2010

**Venue: Department of Computer Science and Engineering  
School of Engineering  
Sir Padampat Singhania University, Udaipur**

**Registration: 08:30 am to 09:30 am (on March 05, 2010 and March 06, 2010)**

**Inaugural Session:**

Date: March 05, 2010

Timing: 10:30 am to 11:30 am

Venue: LT – 1

Welcome Address by Deepak Gour, Organizing Secretary

Inaugural Address by the President - SPSU

Key Note Address by the Chief Guest: Prof. A. B. Samaddar, Director – MNNIT, Allahabad (approx. 30 minutes)

**High Tea: 11:30 am – 11:45 am**

**Details of the Technical Sessions:**

**Tracks:**

1. Computer Networks (Wired and Wireless Technologies)
2. Communication Engineering
3. Computer Organization and Architecture
4. Data Management
5. Internet & Web Engineering
6. Information Security
7. Intelligent Systems and Knowledge Discovery & Management
8. ICT: Tools and Technologies

## Programme Schedule:

**March 05, 2010**

### Session -1 (Computer Organization and Architecture)

Venue: LT – 1

Timing: 12:00 pm – 02:00 pm

Chairman: Prof. Rajkamal, Former Vice Chancellor – DAVV Indore.

Co-chairman: Mr. Arun Kumar, SPSU Udaipur

Rapporteur: Mr. Amrit Ghosh, SPSU Udaipur

Invited Lecture by Prof. Rajkamal

<b>Session 1 - Computer Organization and Architecture</b>		
S. No	Paper Title	Authors Name
1	Development of a Tank-Level process with Proportional controller using Virtual Instrumentation platform and study the simulation of closed loop response	Diptarup Bandyopadhyay, Amrita Mazumdar, Ankita Das & Swarnendu Bhattacharya
2	FPGAs as Mainstream Embedded Systems	Pankaj Goel, V. K. Agrawal,
3	Issues in placement algorithm for VLSI physical design, Min Cut Algorithm Implementation	R. K. Lamba, L. R. Gajriya, K. H. Hingrajiya
4	Real Time Embedded System Design using FPGA	Dr. M. K. Jain, Deepak Gour
5	GSM based Remote Sensing and Control by Microcontroller	Ms. Abhilasha Dubey
6	Parallel Numerical Algorithms using multithreading	Sanjay Kumar Sharma, Dr. Kusum Gupta,
7	Pitfalls Of Cloud Computing	Mrs. Deoyani Shirkhedkar
8	Green Computing	Prashant Singh Yadav, Pankaj Sharma, Ashish Bagla
9	Verification of I2C Bus Controller Using Avalon BUS IN VERILOG HDL	Mr. Prakash Patel, Prof J. V. Dave
10.	Recognition using correlation and support vector machine	Mr. Rahul Bhatia

**Lunch: 02:00 pm – 03:00 pm (Venue: Dining Hall, First Floor)**

**Session -2 (Computer Organization and Architecture)**

Venue: LT – 1

Timing: 03:00 pm to 06:00 pm (Tea: 04:30 pm – 04:45 pm)

Chairman: Dr. Kuntal Patel, Department of Computer Science and Engineering, Nirma University, Ahemadabad.

Co-chairman: Dr. Ghanshyam Purohit, SPSU Udaipur

Rapporteur: Mr. David Mandepudi, SPSU Udaipur

Invited Lecture by Dr. Kuntal Patel, Department of Computer Science and Engineering, Nirma University, Ahemadabad.

<b>Session 2 - Computer Organization and Architecture</b>		
S. No	Paper Title	Authors Name
11	Study of Various Ways to Optimize ASIC Design Cycle Time	Vrushank M. Shah, Nirav R. Parmar, Kunal Acharya
12	Embedded Systems- Pic16f84 Microcontrollers	Ankush Bhatia, Ashish Jain
13	SDRAM in Microcontroller based mobile system	Ruby Abbasi, Neha Gupta
14	Trends in Retargetable Compiler Technology: Critical Analysis of EXPRESSION Framework	Veena Ramnani, Dr. M. K. Jain
15	Multi Core Evolution, Parallelism and Programming	Dr. M. K. Jain, Deepak Gour
16	Smart Grid	Pushpendra Singh, Prof. Mool Singh
17	Optimizing a Multi-Core Processor for Message-Passing Workloads	Mr. Nirav Vora, Mukesh Maheshwari, Deepti Kachhara, Ruchi Agarwal
18	Echo cancellation system and Implementation using Spartan-3E, FPGA	Navneet Garg, Diyua Gautam, Mahendra Kumar, Arti Mistra, Pratibha Soni
19	Claytronics	Abhinav Kumar Singh, Nilaya Mitash Shanker, Anand Prakash Yadav
20	Energy Aware Reliable Real Time System	Dr. M. K. Jain, Deepak Gour
21	Cloud computing architecture	Amit Taneja, Archana Saxena

**Session -3 (Computer Networks (Wired and Wireless Technologies))**

Venue: LT - 2

Timing: 12:00 pm – 02:00 pm

Chairman: Dr. M. K. Jain, Department of Computer Science &amp; Engineering – MLSU, Udaipur

Co-chairman: Dr. Prasoon Chakraborty, SPSU Udaipur

Rapporteur: Mr. Arjun Singh, SPSU Udaipur

Invited Lecture by Dr. M. K. Jain– Department of Computer Science &amp; Engineering – MLSU, Udaipur

<b>Session 3 - Computer Networks (Wired and Wireless Technologies)</b>		
S. No.	Paper Title	Author Names
1	Denial of Service (Dos) Attack in Wireless Sensor Network	Gaurav Kr. Nigam
2	Trends in Designing of Wireless Optical Communication	K. G. Sharma, Tripti Sharma, Deepika Aggarwal, I. Devasena, U. R. Singh
3	Security in Wireless Sensor Networks	Abhinav Kumar Singh, Nilaya Mitash Shanker, Anand Prakash Yadav
4	Wireless Fidelity	Dharmendra Gwala, Basant Dhakad
5	Design And Implementation Of Eeg Recording System With Bluetooth Module And Study Of Brain Signals	Ritesh Kumar Sarswat, Swati Sharma, Pawan Kumawat
6	Performance Comparison of Proactive and Reactive Routing Protocol for MANETs on Randomized Mobility Model	Pavan Kumar Pandey, Prof. G.P. Biswas
7	Concept Of Hsdpa Scheduling Algorithms & Performance Comparison Of Protocols Under Ad-Hoc Network	Chakradhar Verma, Beerendra Kumar,
8	Position Based Reactive Routing Protocol for Ad Hoc Networks (P2RP)	Ravindra. S., S.N. Jagadeesha, Sankhya .N. Nayak
9	Progressive Insight to QoS based Routing Algorithms	Dr. Shuchita Upadhyaya, Gaytri Dhingra
10.	Preemption of flow in MANET routing	Mr. Ajay Prasad, Sourabh Singh verma
11.	Wireless Transmission of electricity using Tesla Theory	Mr. Mahendra Kumar, MLVTEC, Bhilwara

**Lunch: 02:00 pm – 03:00 pm (Venue: Dining Hall, First Floor)**

**Session -4 (Computer Networks (Wired and Wireless Technologies))**

Venue: LT - 2

Timing: 3:00 pm – 06:00 pm (Tea: 04:30 pm – 04:45 pm)

Chairman: Mr. Venkata PPK, Scientist, Computer Division, Bhabha Atomic Research Center, Mumbai

Co-chairman: Dr. Vinod Patidar, SPSU Udaipur

Rapporteur: Mr. Avinash Panwar, SPSU Udaipur

Invited Lecture by Mr. Venkata PPK, Scientist, Computer Division, Bhabha Atomic Research Center, Mumbai

<b>Session 4 - Computer Networks (Wired and Wireless Technologies)</b>		
S. No.	Paper Title	Author Names
13	Global Positioning System (GPS)	Mr. Ritesh Kumar Saraswat, Vishnu Sharma
14	Wireless Sensor Network: Architecture, Challenges and Applications	Gaurav Kr. Nigam
15	Security Issues in Wireless Sensor Networks (WSN)	Deepak Gour, Dr. M. K. Jain
16	Pulse Propagation In Optical Fiber “Linear Media”	Chakresh Kumar, Sandeep Kumar, Archana Bhatia
17	Analysis of MIMO Based WiMAX Simulation for NextGen Wireless Communication	Sunil B Bhatt, R. S.Gajre, K.H.Wandra
18	Device and Circuit Approach for improved wireless communications	Dhiraj P. Tulaskar, VandanaP.Budhwani, Prof.A.O.Amalkar, Dr.K.B.Khanchandani
19	An Adaptive approach for Next Generation Network	Keyur Upadhyay, Rashmin Prajapati, Tejas Bhatt, Milin Patel
20	Evaluation of Proactive Routing Protocol for MANETs under Mobile Grid Computing with Various Network Loads	Pavan Kumar Pandey, Prof. G.P. Biswas
21	Cryptography	Harish Tiwari, Ankit Mantri, Inder Kumawat
22	Behavioral Study of On-Demand Routing Protocols in MANET	Megha Gupta, Vibha Kathuria, Moitreyee Dasgupta
23	Event Detection in Wireless Ad Hoc Sensor Networks	Deepak Gour, Dr. M. K. Jain
24	Latest Web Security Threats Attacking Business Networks	Mr. Deepak Agarwal, Harsh Vardhan Mathur, Satpal Singh Kushwaha, Lokesh Jhirwal
25	Position Tracking using Wireless Sensor and Actor Network (WSAN)	Avinash Panwar, Madhvi Bagga
26	Development Of Adaptive Routing Algorithm For Optical Networks	Kriti Goenka
27	A Fuzzy-Interval Arithmetic Based Traffic Modeling in Optical Networks	Kiran Laddha
28	Performance evaluation and optimization of wifi network using qual net simulator	Mitul R Khandhedia

**March 06, 2010**

**Session -5 (Communication Engineering, Information Security)**

Venue: LT – 1

Timing: 09:30 am – 01:00 pm (Tea: 11:00 am – 11:15 am)

Chairman: Prof. K. K. Sud, SPSU, Udaipur

Co-chairman: Mr. U. R. Singh, SPSU Udaipur

Rapporteur: Mr. Rajesh Ishwar, SPSU Udaipur

Invited Lecture by Prof. K. K. Sud, SPSU, Udaipur

<b>Session 5 -Communication Engineering &amp; Information Security</b>		
S No.	Paper Title	Authors Name
1	Two-Dimensional Set Membership Affine Projection Adaptive Channel Estimation for OFDM Systems	Akshay Soni, Tanvi Sharma, Vijaykumar Chakka
2	Configurable Digital Modulation Techniques For Software Defined Radio Applications	Pratik Trivedi, Yogesh Patel, V.T. Patel, Rachna Jani, V.T. Patel
3	Performance Measurement of Linear Prediction by Recursive-Least-Square Adaptive Filter	Mrs. Hareeta Amit Malani
4	Design and Implementation of Adaptive Viterbi Decoder for High Speed Applications	Chaitali Brahmabhatt,
5	Under Water Acoustic Communication (UWA)	Abhishek Katariya, Anish Vishwakarma
6	Wide-band Orthogonal Frequency Multiplexing (W-OFDM)	Abhishek Katariya, Dushyant Sharma, Antim Arya
7	A Pipeline Systolic Architecture for a Kalman-Filter Based Signal Reconstruction using CMOS Logic in 90 nanometer Technology	Priynka Gautam, Amber Saxena, Rajesh Bathija
8	Performance Evaluation and Processing of OFDM over AWGN Channel	Avinash Panwar, Madhvi Bagga
9	Threats To Mobile Computing	Rohit Kumar Jain, Hina Agrawal
10	A Novel DCT to Integer Transform Conversion Method based on Matrix Decomposition & Data Reshuffling	Muhammed Yusuf Khan
11	Design and Range Analysis of Micro Pressure Sensors	S.Meenatchisundaram, Dr. P.R. Venkateswaran, Dr. S.M. Kulkarni, Dr. G. Uma, Dr. M. Umopathy

12	Salient Features Of Mobile Transaction Models	Yogita Khatri, Meena Arora
13	A TV Ghost Cancellor	Priynka Gautam, Amber Saxena, Rajesh Bathija
14	Steganography: Information Hiding	Chanda Panwar, Varsha Soni
15	Steganography Hiding Critical Information through Multimedia-Audio File	Dr. Kuntal Patel, Lalwani Mahesh, Jadav Hardik
16	Secure M-Commerce	Dr. Manish Shrimali, Liji. Sivaraman
17	Colored Image authentication by Hamming codes	Vipul Singh
18	Information Security and Computer System: An Integrated Approach	Avinash Sharma, Neelam Choudhary
19	Learning to Detect Intrusions	Satish S Salunkhe, Vaishali Malpe
20	Gait Recognition as a Biometric tool For Personal Authentication (Full paper yet to come)	M. Pushpa Rani, G.Arumugam
21	Security Through Digital Signature	Er. Mukesh Kalla
22	Data Encryption Standard	Harish Tiwari, Anurag Jagetia, Nitesh Chouhan

**Lunch: 01:00 pm – 02:00 pm (Venue: Dining Hall, First Floor)**

**Session -6 (Intelligent Systems and Knowledge Discovery & Management, Data Management)**

Venue: LT - 2

Timing: 09:30 am – 01:00 pm (Tea: 11:00 am – 11:15 am)

Chairman: Dr. Niranjan Prasad, Deputy Director – DLRL, DRDO – Hyderabad

Co-chairman: Dr. Debojyoti Mitra, SPSU Udaipur

Rapporteur: Mrs. Nilima Fulmare, SPSU Udaipur

Invited Lecture by Dr. Niranjan Prasad, Deputy Director – DLRL, DRDO – Hyderabad

<b>Session - 6 Knowledge Discovery and Data Management</b>		
S. No.	Paper Title:	Author Name
1	An Object Based Framework For Data Cleaning	Anal Acharya, Soumen Mukherjee
2	Mining Subspaces from High Dimensional Data	Singh Vijendra
3	Effect of Mobility on the Query Processing in Mobile Database System	Samidha Dwivedi Sharma, Dr. R. S. Kasana, Sourbh Singh Verma
4	Data Cleansing Tools and Techniques: A comparative study	Rashmi Chhabra, Payal Pahwa
5	Advantages of hierarchical structure for very large database systems and query processing using internal hierarchical storage structure	Neepa K. Shah
6	Detection and Prevention through Clustering technique of Data Mining.	Prof. Vasanti Dutta
7	Bioinformatics and Drug Discovery	Abhinav Kumar Singh, Nilaya Mitash Shanker, Anand Prakash Yadav
8	Automated Lecture Capture, Navigation and Delivery System	Rajkumar Kannan
9	Continuations versus Partial Data Structures	Satish S Salunkhe, Vaishali Malpe
10	Finger Print Recognition: An application approach	Praveen Kumar Malik, Shekhar Pundir
11	A study and application on Machine Learning of Artificial Intelligence	Viren Fageria, Kajal Mathur
12	Syntactic Text Summarization By Sentence Extraction	Hari Sankar Chaini, Bikram Keshari Rath, Sateesh Kumar Pradhan
13	Ambiguity Exists in Discourse Knowledge Processing	Pallavi Jain, Sandeep Chaurasia
14	Design of a Translation Board for Indian Languages: An Aid for Human Translators	Iti Mathur, Nisheeth Joshi
15	Input Scheme for Hindi Using Phonetic Mapping	Nisheeth Joshi, Iti Mathur
16	Knowledge Discovery and Management	Anil Kumar Sinha, Dr. N.K.Singh,
17	Software Project Development Effort Estimations using Genetic Algorithms	Roheet Bhatnagar, Dr. Vandana Bhattacharjee, Dr. M K Ghosh, Sanjoy Ghatak

18	Implementation of Fuzzy Temperature Controller using Labview	Dhaval Thaker, Naimesh Mehta,
19	Speech Recognition Using Mel Frequency Cepstrum Coefficient	Chetna R. Parmar, Vishal D. Nimavat, Kunal Acharya
20	Conceptual study of Business Rule Engine: Case of NxBRE	Ashwini Makvana, Amit Ganatra, Y. P. Kosta
21	Cross-Language Information Retrieval System	Anushree Khowala, Kanchan Dhanuka, Manika Tiwari
22	Finger Print Recognition Using Minutia Extraction Algorithm	Ankit Mantri, Harish Tiwari
23	Web based Knowledge Gathering: Towards an Intelligent Web	Deepak Gour, Dr. M. K. Jain
24	A Step Toward using Artificial Neural Network Model for Bayesian Regularization & Levenberg Marquardt Training Functions	Pawan Bhadana, Pooja Sharma
25	Ontology Matching – Approaches and Methods	P. M. Jat, Dr. M K Jain, Sudanshu Dwivedi
26	Blue Eyes- A new computing world	Yukti Mehta, Neha Agrawal, Parag Acharya
27	Cross-Language Information Retrieval System	Anushree Khowala, Kanchan Dhanuka, Manika Tiwari
28	Image Processing Based Robo-Soccer	Vishal Rathore, Dr. Sumant Katiyal
29	Developing Ontology for Information Systems Using Object Oriented Engineering Concepts	Shilpa Sharma, Dr. MayaIngle
30	A Braille based Human-Computer Interface and Trainer	Biswarup Mukherjee, Bipasha Chakraborty, Vaibhav Gupta, Abhishek Chowdhury, Sarbojit Ghosal, Pranab Kumar Mandal and Dibyendu
31	Improving Random Forests Decision Tree	Satish S Salunkhe, Vaishali Malpe
32	Computer Vision and Pattern Recognition	Ritu Kanodia, Arushi Somani, Priyanka Kabra
33	Software Management and Reuse: Knowledge Perspective	Sanjiv Sharma, Deepak Gour
34	ERP implementation at University: Case study of CHARUSAT	Ashwini Makwana, Ritesh Patel
35	Data Warehousing	Richa Mishra
36	Comparison of Different Color Space Models Based on their Conversion Error	Sadhana Mishra, Dr. Sarita Singh Bhadaurias
37	Dedupe-Centric Storage	Naveen Hemrajani, Ravi Shankar Sharma, Gajanand Sharma, Tanvi Middha
38	Transaction Execution Management in Mobile Database Systems	Samidha Dwivedi Sharma, Dr.R. S. Kasana, Ajay Prasad

**Lunch: 01:00 pm – 02:00 pm (Venue: Dining Hall, First Floor)**

**Session -7 (ICT: Tools and Technologies)**

Venue: LT - 1

Timing: 02:00 pm – 04:30 pm (Tea: 04:30 pm - 04:45 pm)

Chairman: Prof. Venu Gopalan – Director – University Computer Center – Vigyan Bhawan – MLSU, Udaipur

Co-chairman: Mr. R. N. Mishra, SPSU Udaipur

Rapporteur: Mrs. Poonam Saini, SPSU Udaipur

Invited Lecture by Prof. Venu Gopalan – Director – University Computer Center – Vigyan Bhawan – MLSU, Udaipur

<b>Session 7 - ICT Tools &amp; Technologies</b>		
S No.	Paper Title	Authors Name
1	Complementarity Problem for a Three Tank System	Dr. P. R. Venkateswaran, Cyril Joseph, S. Meenatchisundaram
2	Reducing Blocking Artifacts Using Denoising Algorithm With Shape Adaptive Dct In Color Images	C.S.Rawat, Dr. S Meher
3	Designing of Modular GUI for automation in LabVIEW	Kuldip. H. Tarpara, Prof. Rakesh C. Patel
4	Boosting Agricultural Developments Using IT and ICT	P.U.Bhalchandra, N.K. Deshmukh, S.N.Lokhande, R.V. Kulkarni, Dr. S.D.Khamitkar
5	Revisiting ICT Applications for the Bottom of Pyramid	Shubham Goswami
6	A Design and Development Method of Indian Army System Software	Sachin Dev Kanawat, Amit Bhati, Apurva Pandey
7	Bioinformatics	Dr. Manish Shrimali, Ravi Fulani
8	Digital Implementation Of Ridgelet Transform For Image Representation	S.N.Makwana, Prof.. J.V.Dave, Prof. S.D.Joshi
9	Global Perspective of ICT: A Case Study of Asian Countries (Full paper is yet to come)	Puneet Kumar, Sanjeev Patwa, Paras Kothari, Ajay Prasad
10	Performance Evaluation Tool for LDPC Codes	Ms. Ruchi I. Gajjar, Dr. K. R. Parmar, Dr. Nishit Pandya
11	Computerization Issues for Society: A Social and Moral problems	Sanjay Kumar Tiwari, Vishnu Swaroop, Gyanendra Kumar Gupta
12	Parallel Graph Colouring Algorithms on the GPU using OpenCL	Shilpi Sengupta, Avinandan Sengupta,
13	Design Patterns in Development of AnuVi	Venkata P P K, Bose S K, Pritam P Shete, Apte A G
14	Home Automation through UIRT and gimbal assembly	Supriya Pande, Mukul Pande, Prachi Deotare, Hrishikesh Deshpande
15	A New Way Of Software Development: Human Life Oriented Software Development Model	Kirtesh Jailia, Manisha Jailia, Manisha Agarwal

16	Advanced Driver Assistance Systems	Shriyansh Sharma, Vivek Mehendiratta
17	Ict And Resources For Teaching	Dr. M. M. V. Baig, Dr. R. D. Barde
18	Retrieving Reusable Software Component: A Critical Survey	Shambhu Kumar Jha, Prof (Dr.) R.P. Mahapatra
19	Identify the 3D structure of Envelope small membrane(sM Protein) protein of Human SARS coronavirus (SARS-CoV; Severe acute respiratory syndrome coronavirus) using Homology Modeling	Pratima Bajpai
20	Test Framework and Testability for Collaborative Real-time Tools Editing	Sunil Kumar
21	An Efficient Paradigm for Implementation of Process Models	Archana Bhatnagar, Dr. Vijay Singh Rathore, Ashutosh Gupta
22	Introduction of Carbon Nanotubes and their Current Applications	Prof. Sachin Saxena, Kapil Sirohi, Kapil Dev Sharma
23	Scientific Visualization using VTK	Dhirendra Kumar Verma, Alpana Rajan
24	Complexity of Algorithm for Bisection Method	Dinesh Singh Ruhela, Dr. R.N.Jat

**Session -8 (Internet & Web Engineering)**

Venue: LT - 2

Timing: 02:00 pm – 04:30 pm (Tea: 04:30 pm - 04:45 pm)

Chairman: Dr. P. R. Venkateswaran, Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal.

Co-chairman: Mr. Ashutosh Gupta, SPSU Udaipur

Rapporteur: Mr. Ajay Prasad, SPSU Udaipur

Invited Lecture by Dr. P. R. Venkateswaran, Department of Instrumentation and Control Engineering, Manipal Institute of Technology, Manipal.

<b>Session 8 - Internet &amp; Web Engineering</b>		
S No.	Paper Title	Authors Name
1	Strategic Approach & secure Web access in electronic share and stock market	Prof. Nimesh I Modi, Prof. Jayesh N. Modi
2	Role of statistical data analysis in web discovery solutions	Kailash C Kandpal, Dr. Virendra Swarup
3	Design of Web-based Examination System to Improve Learning in Vocational Education in Schools of India	Deepak Shudhalwar, Prakash Khanale
4	Web 2.0 implementation in social networking	Siddhant Satija
5	Web Usage Mining: Discovery and applications of usage patterns from internet	Ms. Archana Chaudhary, Jaya Thomas, Dr. A.K. Ramani
6	How to Raise Performance of Web Services?	G. M. Tere, P. P. Patil
7	The Downside of the Internet	Dr. Vikram Singh, Amit Sharma
8	Intelligent Web System in Modern Era	Prashant Sahai Saxena, Suman Bhatnagar, Ripu R. Sinha, Rajat Goel
9	Electronic Governance Initiatives to Promote Empowerment of Rural Masses in Rajasthan	Amit Sharma, Vikram Singh, Varun Malik
10	Mobile and Web based Learning system	Vijay Patidar, Anil Dangi,
11	Global Impact of e learning: An Analysis	Avinash Sharma
12	e- Learning through Knowledge Management	Sanjiv Sharma, Deepak Gour

## **Valedictory Session:**

Date: March 06, 2010

Timing: 05:00 pm to 06:00 pm

Venue: LT – 1

Address by Prof. P. C. Deka – Vice Chancellor - SPSU

Address by Dr. Vinay Pathak, Vice Chancellor – Uttrakhand Open University (approx. 20 minutes)

Best paper award.

Recommendation of the Conference

Vote of Thanks by Deepak Gour – Organizing Secretary