

# THE BPPIMT - NEWSLETTER

A Quarterly In-House Magazine

B.P. Poddar Institute of Management and Technology

E-mail: newsletter@bppimt.ac.in

Issue - X, January 2011 Chief Advisors: Prof (Dr.) Sutapa Mukherjee Editor in Chief: Prof Emeritus (Dr) S.C. Chakravartty, Prof (Dr) B. N. Chatterjee





We left behind another eventful year and will start a new year with new promises and expectations. I am sure that we shall overcome all the impedances with our dedication, confidence and hard work. In this new dawn, let us promise to join our hands together to raise the flag of the Institute high and make the Institute a Centre of Excellence in all respect under the guidance of the luminaries of the Institute. I would like to take this opportunity to wish all of our students, faculties and staff members a very happy and prosperous new year.

# **ACADEMIC NEWS:**

# **Publications:**

## Journals:

Samir K Bandopadhyay, **Indra Kanta Maitra** of Computer Centre published, "Digital imaging in mammography towards detection and analysis of human breast cancer" in International Journal of Computer Applications, ISSN 978-93-80746-67-8, IJCA-Special Issue, Vol. CASCT, Issue 1, pp. 29-34, August 2010.

Samir K Bandopadhyay, **Indra Kanta Maitra** of Computer Centre published, "A technique for detection and analysis of human breast cancer" in International Journal of Computer Applications, ISSN 978-93-80746-76-0, IJCA-Special Issue, Vol. 6, Issue 4, pp. 18-23, September 2010.

Samir K Bandopadhyay, **Indra Kanta Maitra** of Computer Centre published, "An application of palette based steganography" in International Journal of Computer Applications, ISSN 978-93-80746-76-0, IJCA-Special Issue, Vol. 6, Issue 4, pp. 24-27, September 2010.

Samir K Bandopadhyay, **Indra Kanta Maitra** of Computer Centre published, "Preprocessing of digital mammogram for image analysis" in International Journal of Computational Intelligence and Information Security, ISSN 1837-7823, Vol. 1, Issue 7, pp. 29-41, September 2010.

Mr. Abhik Sengupta, Mr. Vivek Nandey, **Dr. Sabnam Sengupta** of Department of Information Technology, "ETDSOA: A Model for Event and Time Driven Service Oriented Architecture", in ACM Sigsoft Software Engineering Notes (SEN), Volume 35 Issue 6, November 2010.

Samir K Bandopadhyay, **Indra Kanta Maitra** of Computer Centre published, "Anatomical asymmetry of human breast for indicator of breast cancer" in International Journal of Computer Application, ISBN 978-93-80746-81-4, Vol. 9, Issue 2, pp. 5-8, November 2010.

**Oshmita Dey** of Department of Mathematics, Debjani Chakraborty, published "A single period inventory model with a truncated normally distributed fuzzy random variable demand" in International Journal of systems science, 1464-5319 (Electronic 0020-7221 paper), 25<sup>th</sup> November, 2010.

**Debnath Bhattacharyya** of Department of Information Technology, Tai-hoon Kim, Subhajit Pal published, "A comparative study of wireless sensor networks and their routing protocols" in Sensors, MDPI Publishing, Basel, Switzerland, 10.3390/s101210505, Vol. 10, Issue 12, pp. 10506-10523, December 2010.

**Debnath Bhattacharyya** of Department of Information Technology, Tai-hoon Kim published, "Design of artificial neural network for handwritten signature recognition" in International Journal of computers and communications, Vol. 4, Issue 3, pp. 59-66, December 2010.

**K. Prabhakaran** of Department of Chemistry published, "Investigations on Physiochemical factors and plankton community of fresh water habitats in Madambakkam Town Panchayat, Tamilnadu and its adjacent areas" in Environment and Ecology, ISBN 0970-0420, 28(48) 2010, December 2010.

# Conferences:

Samir K Bandopadhyay, **Indra Kanta Maitra** of Computer Centre, Souvik Banerjee published, "Digital Imaging in Pathology towards detection and analysis of human breast cancer" at IEEE Second International Conference on Computational Intelligence, Communication Systems and networks (CICSYN 2010), ISBN 978-1-4244-7837-8, pp. 295-300, 28th-30th July 2010.

Ms. Inadyuti Dutt of Department of MCA and Mr. Soumya Pal of Department of MCA published their paper titled "A Heuristic for Dynamic Traffic grooming in WDM Optical Mesh Networks" at CNC 2010 Proceedings of the Oct 2010 International Conference on Advance in Communication, Network, Computing, published by IEEE Computer Society, Washington DC, USA, archived by ACM Digital Library, ISBN: 978-0-7695-4209-6, pp. 128-133.

R.Goswami, S.C.Chakravartty, Esha Bose, U.Mukherjee, P.Saha and N.Dutta of Department of Physics published "Conducting properties of nanostructured graphite-day composit" at Condensed matter days 2010, Kalyani University, Nadia, Sl. No. -060, pp. 104, 25th Ausust 2010.

**Esha Bose** of Department of Physics and Sudipta Pal published "Magnetic properties, resistirity and heat capacity of Ca0.85Eu0.15Mn03 comp", at Condensed Matter Days 2010, Kalyani University, Nadia, Sl. No. -072, pp. 166, 25<sup>th</sup> Ausust 2010.

**Mr. Subhasis Mallick** of Department of MCA & Prof. Amitabha Sinha presented the paper titled "A Realistic Model for runtime incremental task scheduling in distributed memory multiprocessor systems" in the 1<sup>st</sup> International conference on parallel distributed and grid computing, ISBN No.-978-1-4244-7672-5, IEEE conference, Record no.-17365, pp. 55-60, (28-30 October, 2010).

S.K. Bandyopadhyay, S. Roy, **Mr. Debnath Bhattacharyya** of Department of Information Technology and Mr. Tai-hoon Kim presented the paper titled "Symmetric Cryptosystem for Information Security" at the International conference on IT and Business intelligence (IEEE CIS-ITBI2010), ISBN 978-81-7446-900-7, pp. 12-19, November 12-14, 2010, Nagpur, India.

S. Pal, **Mr. Debnath Bhattacharyya** of Department of Information Technology, Geetam S. Tomar, Tai-hoon Kim published the paper titled "Wireless Sensor Networks and its Routing Protocols- A Comparative Study" in the proceedings of the 2010 International Conference on Computational Intelligence and Communication Systems (IEEE-CICN 2010), November 26-28, 2010, Bhopal, India.

Samir Kumar Bandyopadhyay, Indra Kanta Moitra, **Debnath Bhattacharyya** of Department of Information Technology, Tai-hoon Kim published the paper titled "Reserved Fields of Palette for Data Hiding Steganography" in the proceedings of 2010 International Conference on Computational Intelligence and Communication Systems (IEEE-CICN 2010), November 26-28, 2010, Bhopal, India.

S.Pramanik, Samir Kumar Bandyopadhyay, **Debnath Bhattacharyya** of Department of Information Technology and Taihoon Kim published the paper titled "Identification of Plant Using Leaf Image Analysis" in the proceedings of the International Conference on Multimedia, Computer Graphics and Broadcasting (MulGraB 2010), December 13-15, 2010, International Convention Center Jeju, Jeju Island, Korea, pp. 291-303.

Mrs. Jayeeta Chanda of Department of Computer Science, Dr. Sabnam Sengupta of Department of Information Technology, Dr. Ananya Kanjilal of Department of Computer Science, and Prof. Swapan Bhattacharya presented the paper titled "CA-Graph: A Context Aware Graph to model Enterprise Service Bus" in the Conference IEEE INDICON 2010 held during 17-19 Dec, 2010.



Mr. Dipankar Majumdar of Department of Information Technology, Dr. Ananya Kanjilal of Department of Computer Science, Dr. Sabnam Sengupta, of Department of Information Technology, and Prof. Swapan Bhattacharya, presented the paper titled "Fault Prevention Metric of a Compiler: A Probabilistic Study" and it is to be published in Proc. Of 2nd International Conference on Information & Multimedia Technology, Hong Kong, December 28-30, 2010.

S. Saha, **Debnath Bhattacharyya** of Department of Information Technology and Tai-hoon Kim published the paper titled "OSI Layer Wise Security Analysis of Wireless Sensor Network" in the proceedings of the International Conference on Multimedia, Computer Graphics and Broadcasting (MulGraB 2010), December 13-15, 2010, International Convention Center Jeju, Jeju Island, Korea, pp. 276-282.

Rituparna Samaddar, Sandip Samaddar, Tai-hoon Kim, and **Debnath Bhattacharyya** of Department of Information Technology published the paper titled "Hierarchical Data Structures for Accessing Spatial Data" in the proceedings of the International Conference on Multimedia, Computer Graphics and Broadcasting (MulGraB 2010), December 13-15, 2010, International Convention Center Jeju, Jeju Island, Korea, pp. 267-274.

**Debnath Bhattacharyya** of Department of Information Technology and Tai-hoon Kim published the paper titled "Signature Recognition using Artificial Neural Network" in the proceedings of the 9th WSEAS International Conference on COMPUTATIONAL INTELLIGENCE, MAN-MACHINE SYSTEMS and CYBERNETICS (CIMMACS '10), University of Los Andes, Merida, Venezuela, December 14-16, 2010.

P. Ghosal, A. Chakraborty, A. Das, Tai-hoon Kim, **Debnath Bhattacharyya** of Department of Information Technology published the paper titled "Design of Non Accidental Lane", in the proceedings of The 9th WSEAS International Conference on COMPUTATIONAL INTELLIGENCE, MAN-MACHINE SYSTEMS and CYBERNETICS (CIMMACS '10), University of Los Andes, Merida, Venezuela, December 14-16, 2010.



Debnath Bhattacharyya of Department of Information Technology published the paper titled "SIG-PASSWORD-Design and analysis of authentication scheme for graphical password" at International Conference on Computer Applications, Pondicherry, India, December 24-27, 2010.

# **Special Recognition:**

Mr. Soumya Paul, Asst. Prof. & HOD (CA) acted as Member of Technical Advisory Committee of International Conference on Computers and Communications, technically supported by IEEE(MP) and IEEE Computer Society(Mumbai Section) and CTS(MP Chapter) in December 2010 held at Bhopal.

# **Articles in Magazines:**

Dr. Uddipan Mukherjee of the Department of Physics published 22 articles in various magazines and journals during July-Dec 2010.

## Participation:

Dr. Shila Ghosh, Professor & HOD of the Department of Electronics & Communication Engineering attended one day workshop on Matlab application in Digital Signal Processing on 24<sup>th</sup> August 2010.

# **INSTITUTIONAL NEWS:**

#### **Student Achievements**

Ms. Surupa Dutt, student of the department of Computer Applications secured 9.38 DGPA in the final exam of WBUT 2010 and has been selected University Topper and awarded with a gold medal. We wish her a grand success in all future endeavors.

Mr. Deepak Kumar, Mr. Jaiween Singh and Mr. Naman Singhal students of 3<sup>rd</sup> year Computer Science and Engineering department and Mr. Roshan Kumar student of 3rd Year Information Technology department have secured 1<sup>st</sup> place in the following events

- ROBO OLYMPIC at BIT College, Kolkata.
- ROBO RACE at BIT College, Kolkata.

The event was held at BIT for two days from 5th October 2010 to 6th October 2010. This was a part of the Inter College Tech fest.

#### One Day Seminar

The SPIE student chapter "ECE Dept" organized a one-day seminar on 29th October, 2010. Prof. Vijaya Ramarao, department of Physics, IIT Bombay delivered a talk on "Optical Fiber and its present relevance in communication". It was a fascinating talk which was greatly appreciated by the faculty members and the students.



Prof. Ramarao delivering talk.



Delegates attending seminar.



Seminar organized by ECE dept.



Chapter members with Dr. Ramarao.



Faculties having discussion.

# **One Day Colloquium**

Electronics & Communication engineering department organized a one day colloquium on 13th November 2010 at BPPIMT campus. Dr. Sanatan Chattopadhyay of the Department of Electronic Science, CU and Dr. Amlan Chakraborti of the A K C School of Information Technology, CU were the two invited speakers for the program. Dr. Chattopadhyay delivered a two hour lecture on "Strained Si-SiGe system for low power high speed CMOS applications". Dr. Chakraborti spoke for another two hours on "FPGA based real-time embedded system design". Both the topics were appreciated by the students and the faculty members of the Institute. Prof. (Dr.) Sutapa Mukherjee, Principal of the Institute, Prof. (Dr.) B N Chatterji, Dean of the Institute and the HODs were present among the delegates.

# Award Distribution Ceremony

The annual award distribution ceremony for the students was conducted on 20<sup>th</sup> November 2010. The toppers of various departments and the overall topper of the Institute were awarded in the function.

## **Semester Exams**

The Institutional exam committee consisting of Dr. Shila Ghosh as the Officer-in-charge, Mrs. Nandita Sanyal and Mr. Sibasish Senapati as supervisors conducted the semester exams as per the guidelines from WBUT during 7<sup>th</sup> to 22<sup>nd</sup> December 2010. With support from all members of the Institute the exam was a success and was highly praised by the USS.



Dr.Majumdar delivering lecture.

## Seminar

Dr. Debashish Majumdar, Scientist CDAC Kolkata, delivered a talk on "Recent Trends in Image Processing" on 1st December 2010. The seminar talk was organized by the CSE department and was attended by a good number of faculty members as well as students.

## **Faculty Seminar**

Ms Tista Banerjee, Assistant Professor of the department of Electrical Engineering delivered a talk on 24<sup>th</sup> December 2010 on the topic "P-192 Off-line Optimization of PI and PID Controller for a Vector Controlled Induction Motor Drive using GA algorithm" at the Institute Seminar hall. The main objective of this work is to optimize the PI and PID gain parameters of a field oriented control (or vector controlled) induction motor drive. The system has been optimized initially with Z-N method and then it has been optimized using genetic algorithm.

## **Pre-Placement Activities**

- A computer adaptive test AMCAT was held for the 4<sup>th</sup> year students on 16<sup>th</sup> November 2010 by Aspiring Minds.
- A training cum job program was held by Peobrics on 26<sup>th</sup> November 2010 for the final year MCA students.
- A soft skill training program was conducted by TIME during the last week of December 2010.

# "TECHSTORM 2.1" - TECH FEST 2010







Principal welcomes Prof. B P Sinha in the Tech Fest 2010



Audience listening the talk

A two day intra college technical festival "TECH STORM 2.1" was organized in our institute. This was a joint effort of the faculty members of tech fest committee and the enthusiastic student volunteers of our institute. The programme started on the 9th October 2010 with an inaugural function. Prof. Bhabani Prasad Sinha, Head of Advanced Computing and Microelectronics unit at Indian Statistical Institute, graced the occasion by his presence as chief guest. The function started with the lighting of lamp by the Chief Guest, the Principal, the Dean, the Registrar and the other respected teachers followed by a melodious Swaraswati Bandana presented by Mr. Sabyasachi Chakraborty.



Inauguration by Prof. Sinha



Judges of debate competition

The Principal, Prof (Dr.) Sutapa Mukherjee made the welcome address. The Dean, Prof. B. N. Chatterji highlighted the importance of technical fest and introduced us with the chief guest. Prof. B. P. Sinha, in his address expressed his appreciation. Vote of thanks was delivered by our Registrar, Prof. (Dr.) Sandip Ghosh. "Tech Storm2.1" started with the first event "NIRMAN". It was a group event in which the participants developed a model, exhibited and demonstrated the same in presence of judges - Prof. Sinha, the Dean and the Principal of BPPIMT. All models were certified as excellent and innovative. The first prize was bagged by ECE 2<sup>nd</sup> year students – Md. Wasim Sayed, Nasibullah and Nazimul Islam Gazi for their model 'Smart Switching System". The second event of the day was "Socrates Playground" - a group debate competition between six groups, each group consisting of four participants. The whole programme was coordinated by Ms. Kakali Bhattacharyya and Ms. Dolonchampa Das. The final round topic was "Are social networking sites doing us any good or are they just a sophisticated way of stalking people?" CSE 3rd year students – Anirban Banerjee, Aritro Chakraborty, Anwita Bhatterjee and Prathana Chetterjee.won the first prize. Afternoon event was mathematical game competition -"Omega Trix". The event became so popular among the students that a huge number of students from all sections participated in it. The competition was of two levels. First level was eliminatory where the students had to solve two "Kenken" and two "En route" problems. The qualified students of 1st level appeared in the final level where they solved a set of tricky mathematical puzzles within a speculated time limit.

On the second day the events were Robot games (Robotrix and Crossfire), Software games (Virtuo Combat), C-coding competition (Fanta-C) and web page designing (Webstar). Robotrix was an autonomic robot game where the participants had to build an autonomous robot that reached a specified point in a matrix by procuring the information of the number of rows and columns while traversing the path. The event was won by Arnab Das (ECE, 4<sup>th</sup> year), Samantak Das (ECE, 4<sup>th</sup> year), Debanka Bhattacharjee (ECE, 4<sup>th</sup> year) and Sangram Laha (EE, 4<sup>th</sup> year).

In Crossfire the participants had to build manually controlled robot which could traverse a given path to reach a point and on reaching the point the robot had to face a rival robot. The event was won by Rajeev Ranjan Singh (IT, 1st year), Sourav Karmakar (CSE, 1st year), Sourav Das (CSE, 1st year) and Soham Pramanik (CSE, 1st year). Webstar was won by Kaushik Das (IT 3st year) and Abarna Sarkar (IT 3st year).



Students exhibiting project



Winners of debate competition



Students showing their project



Students exhibiting before judges

Two different software games were arranged for participants: FIFA 2008 for one to one challenge which was won by Argha Dutta of ECE 1st year and COUNTERSTRIKE version 1.6 was for groups' participation and was won by the group of Madhur Mohta (CSE, 4th year), Arindam Roychoudhury (CSE, 4th year), Debojyoti Chakraborty (CSE, 4th year), Sarvesh Bhagat (CSE, 4th year) and Suman Kr Saha (EE, 2th year). Fanta-C was two-member C-coding group contest of three rounds. In the final round the qualified teams prepared a C program to satisfy the given objective. The champions for this event were Arnab De Sarkar (MCA 2th year) and Vashkar Bhattacharjee (MCA 2th year). There was also a two-day group photography contest "SNAPIT". The theme was "NATURE - in and around our college" which was announced on the first day after inaugural session and the participants were told to submit the photographs on the second day afternoon. All the photographs were judged by an expert Mr. Sandipan Majumdar, a travel journalist and photographer. The first prize went to Prosenjit Paul (IT 2th year) and Rittwik Ghosh (IT 2th year). A small cultural programme was arranged by the students in the evening. Thereafter the winners of all the events were announced and the medals and certificates were given. Finally, the TECHSTORM 2.1 wound up with a vote of thanks given by Dr. Rupa

With a vision to spread knowledge and inspire the students in areas of creativity, liveliness and intellect and debating the tech fest of BPPIMT became a grand success. The tech fest committee consisted of Dr. Rupa Pal, Ms. Ivy Majumdar, Mr. Pantha Deb Saha, Ms. Sutapa Mukherjee, Mr. Amlan Raychaudhuri, Mr. Kalyan Mohanta, Mr. Kunal Das, Mr. Subhasis Mallick, Ms. Rashmita Mishra, Ms. Jayeeta Chanda and Mr. Indra Kanta Moitra.

Editorial Committee:

The Editorial Committee consists of a team of Faculty Members headed by Prof (Dr.) N. K. Datta, with Prof. Emeritus Dr S.C. Chakravartty as Chief Editor, Prof (Dr.) Sutapa Mukherjee, Principal and Prof (Dr.) B.N. Chatterji, Dean as the Chief Advisors and Mr. Arijit Saha Assistant Professor as Editor of the Newsletter.

Call for Contributions:

Contribution for the Newsletter on the global and national news related to technical, economical, philosophical and general science etc. is solicited from all the members of the BPPIMT family and the students. The prospective contributors are requested to send their writings in about 200 words electronically to the mail address: newsletter@bppimt.ac.in. Publication in the Newsletter is at the full discretion of the Editorial Committee.