IEEE The Institute of Electrical and Electronics Engineers. Inc

Message from Chairman

Dear Members,

Greetings from IEEE INDIA COUNCIL.

Researchers have developed a variety of prognostics and health management approaches, methods, and tools, but applications to real-world situations have been hindered by the lack of real visibility into these tools, uniformity in the application of these tools, as well as consistency in their demonstrated results. There is a need for documented and favorable guidance that will encourage practitioners to invest the resources necessary to put these techniques into practice.

CALCE has initiated the development of an IEEE standard for PHM which will act as a guide for those who wish to implement prognostics for complex systems. The IEEE Reliability Society is sponsoring the development of this standard. The project authorization request submitted to the IEEE Standards Committee has been approved.

We invite all who are interested in developing the standard to join the working group. Pl. send your details to undersigned.

Please find attached the call to participate in the working group.

Thanks for your kind support and Looking forward for your inputs.

Dr. Ram Gopal Gupta

General Chair, ICTEE 2012
Chair, IEEE Education Society Chapter, India

IT in 2012

Prof. S. Sadagopan

General

- Election results in March 2012; UP goes to Samajvadi Party, Uttarakhand & Manipur go to Congress, Punjab and Goa go to BJP; young Akhilesh Yadav becomes the Chief Minister of the largest populated State Uttar Pradesh; IIT-educated Manohar Parikkar is the Chief Minister of Goa
- Trail-blazing Rail budget on March 14, 2012; unfortunately, Railway Minister loses job on March 15, 2012 and Government reverses most decisions!
- Lack-luster budget by UPA on March 16, 2012; missed opportunity
- DIT (Department of Information Technology) becomes DEITY (Department of Electronics & Information Technology) from March 1, 2012
- Tata Power commissioned its Munrda Power project with the first 800 MW super-critical boiler on March 9, 2012; with all 5 units getting commissioned over time, the 4,000+ MW plant will become the largest private sector, single location thermal plant in the world
- IPS officer Narendra Kumar killed by mafia in MP on March 8, 2012
  Globally,
- Russian President Putin wins Elections and gets back to power on March 4, 2012
  Myanmar elects Nobel Prize winner and long time political activist Ang Sui on Mar 31, 2012

Technology

- Encyclopedia Britannica shuts down printing paper-based encyclopedia on March 14, 2012; in the process, it gives way for Wikipedia
- Indian TV to digital by June 30, 2012 in all the four metros (Delhi, Mumbai, Kolkata & Chennai)

Products

- The much-awaited **Apple iPad 3** (officially as "**New iPad**") was launched on March 7, 2012; starts selling from Mar 16; sells 3 million over the weekend (March 16-18, 2012)!
- **Nokia** launches **Asha** 303 for Rs 8,900 in India on March 19, 2012
- **Airtel Money** (payment thru mobile handsets to any mobile handset) launched in more cities in March 2012
- **Reliance** CDMA **Tablet** priced Rs 12,999 launched on March 12, 2012 Interstingly
- Nokia shuts down **Nokia Money** service in India from April 2012

Markets

- **Mahindra Satyam** merge on March 22, 2012; buys international operations of BPO firm vCustomer for $ 27 million
- **Acer** is No 1 in India in 2011 going past HP in Desktops
- **ONGC** disinvestment on March 16, 2012 is a disaster (saved by LIC)
- **RCOM** flies for $ 1 billion IPO in Singapore for Under Sea cable business on March 19, 2012
  Globally,
- **Apple** market capitalization touches $ 500 billion on March 1, 2012
- **AMD** acquires SeaMicro for $ 334 million on March 2, 2012
- **Cisco** to buy NDS for $ 5 billion
- **Vista** buys British banking software major Misys for $ 2 billion on March 19, 2012
- **UPS** to buy TNT for $ 8.6 billion on March 19, 2012
- **HP** merges Print & PC division on March 21, 2012
- **Facebook** IPO continues to be the "talk of the town" in March 2012

Indian IT companies

- DSP IP major **Ittiam** crosses 10 years of operation with $ 20 m revenue with 37% royalty in March 2012, very unusual for Indian IT companies
- Gurgaon-based remote PC support services "**ETechies**" launched in 3 cities including Bangalore in March 2012

Education & Research

- Hungarian mathematician Ende Szemeredi (of the Department of Computer Science, RUTGERS University, USA) gets Abel Prize
- Sitaram Jindal Foundation Awards announced on March 1, 2012
- **MIT x** new online certification starts on March 5, 2012
- **TED Ed** YouTube channel in March 12, 2012
- Tata launches **HBS Classroom** in "Taj Lands End" Hotel in Mumbai

People

- Subroto Bagchi is the **Mindtree** Chairman from March 1, 2012
- Sathyanrarayana is the **IT Secretary** at the Centre from March 1, 2012
- 38 year old Akhilesh becomes Chief Minister of UP; another 39 year old Rahul Dravid retires from cricket in March 2012
- **Sri Sri Ravisankar** visits Pakistan in March
- President Obama selects **Jim Yong Kim**, Dartmouth College President as World Bank President on March 24, 2012
- IMF Chief Christine Legarde visits India during March 2012

Some interesting numbers

- India set to touch **$ 100 billion IT annual business** and 1 billion mobile phones soon
- "Apps" on **Apple** Stores cross 25 billion downloads on March 2, 2012; 3 million "New iPad" sold in 4 days (Friday to Monday) of the launch (March 16, 2012)
- China has **1 billion mobile customers** by March 2012; had 500 million in 2007; India has 900 million; US has 350 million!
- **Smartphone** sales of 487.7 million **exceed PC sales** of 414.6 million in the year 2011 (first time smart phones exceed PC sales)

IEEE EMBS Special Topic Conference on Point-of-Care Healthcare Technologies
January 16-18, 2013, Sheraton Bangalore at Brigade Gateway
Bangalore, India

Synergy Towards Better Global Healthcare

POINT-OF-CARE HEALTHCARE

Bangalore, India
2013

Announcement

IEEE Engineering in Medicine and Biology Society is pleased to announce the IEEE-EMBS Special Topic Conference on Point-Of-Care (POC) Healthcare Technologies that will focus on innovation, research, technology development and best practices in deployment of health monitoring technologies in developing and developed economies for better global healthcare. The conference will feature research presentations and technology panel discussions and forums on recent technological advances and global issues on implementation of POC technologies. Though the challenges of providing high-quality healthcare in developing countries are different than those in developed countries, there is a common goal to provide access to health monitoring and assessment technologies to people with limited or no healthcare facilities. While the developed countries may find POC technologies as effective means for reducing healthcare costs and improving efficiency, POC technologies are critical in responding to essential healthcare needs in countries with large populations or rural areas. The developing countries in the eastern part of the globe accounting for more than $2/3^{rd}$ of the population of the world face the basic challenge of providing minimal healthcare to all people living in adverse geographical or economic constraints, and also monitoring critical diseases and infections such as HIV/AIDS, TB, malaria, etc. The challenge becomes even more critical in the situation of potential outbreak of an epidemic. The proposed conference will provide an international forum to explore POC health monitoring technologies that could play significantly important role mode in "well-being" of a healthy society with increasing proportion of elderly people.

The conference will provide a unique global networking opportunity with leading researchers, students medical and industry professionals, and policy makers in innovative healthcare technologies.

Organizing Committees:

Conference Chairs:

Chair: Atam P. Dhawan, Ph.D.
Distinguished Professor and Interim Dean
NJIT, USA
Co-Chair: Manju Mahadevappa, Ph.D.
Asst. Professor, SMST, IIT Kharagpur, India

Program Chairs:

Chair: P K Dutta, Ph.D. ,Professor and Head SMST, IIT Kharagpur, India
Co-Chair: Metin Akay, Ph.D., Chair, Biomedical Engineering, University of Houston, USA

International Program Chairs:

Chair: Nitish Thakor Ph.D., Professor Biomedical Engineering, Johns Hopkins University, USA
Co-Chair: Gudrun Zahlmann, Manager, Imaging Infrastructure, ROCHE, Switzerland

Local Organizing Committee Chair:

Jayanta Mukherjee Ph.D., Professor and Head, Computer Science & Engineering, IIT Kharagpur, India

Plenary and Keynote Speakers

Roderic Pettigrew, M.D., Ph.D., Director, National Institute of Biomedical Imaging and Bioengineering, NIH, USA
Nigel Lovell, Ph.D., Professor, University of New South Wales, Sydney, Australia
Balram Bhargava, M.D., Professor AIIMS, Stanford-India Biodesign Program, India
S.K. Guha, Ph.D., Emeritus Professor, Indian Institute of Technology, Kharagpur , India
Y.T. Zhang, Ph.D., Professor at CUHK, & Director, Key Lab for Health Informatics of Chinese Academy of Sciences (HICAS),China
Shuming Nie, Ph.D., Distinguished Faculty Chair Professor & Director, Emory-Georgia Tech Cancer Nanotechnology Center, USA
May D. Wang, Ph.D., Associate Professor, Georgia Institute of Technology and Emory University School of Medicine , USA
Kenji Sunagawa, M.D., Ph.**D.,** Professor and Chief, Cardiovascular Medicine at the Kyushu University Hospital, Japan.
Ramgopal Rao, Ph.D. Professor, Indian Institute of Technology, Bombay, India
S Mukherjee, Ph.D. Professor, Indian Institute of Technology, Bombay, India
R M Vasu, Ph.D., Professor, Bioinstrumentation, Indian Institute of Science, Bangalore, India

Important Dates:

Website opens for submissions of manuscripts for 4-page papers and poster presentations: July 1, 2012
Website closes for manuscript submissions: September 1, 2012
Notification of acceptance: October 15, 2012 (authors of accepted papers must register for the conference by Nov 1)
Final submissions: November 15, 2012
Industry exhibits proposals: November 1, 2012

Conference Themes and Topics of Interest

The conference will cover a broad spectrum of POC healthcare technologies including sensor technologies, biomarkers, system integration, mHealth, eHealth, health monitoring and informatics, POC decision support system and compliance issues related to affordable global healthcare with the following themes and topics, but not limited to:

Theme 1: Point of Care Sensor Technologies
- Smart sensors for health monitoring
- Wearable sensors
- Biomarkers
- Sensor reliability, long-term stability and biocompatibility
- Body Sensor Networks

Theme 2: Wireless Computing for POC Healthcare
- Wireless computing, communication and networking in POC healthcare
- Wearable and wireless devices in pervasive healthcare
- Wireless sensor and medical device control
- Multi-network and device management
- Safe, effective, secure and reliable use of wireless technology in healthcare

Theme 3: POC Health Informatics and Monitoring Technologies
- mHealth
- Sensor-device integration and data collection
- Multi-sensor data fusion and analysis
- POC health informatics and decision support systems
- Personalized medcine

Theme 4: Global Issues in POC Healthcare
- Patient monitoring and care in diverse environment
- Mass screening of critical diseases-specific diagnostic/prognostic variables
- Critical challenges in remote diagnosis and patient management
- Affordable global healthcare

Tentative Program:

January 16, 2013: Plenary Presentations; Invited Keynote Talks, and Panel Discussion; Opening Ceremony and Banquet
January 17, 2013: Selected Oral Platform Presentations; Poster Sessions and Industry Networking Forums.
January 18, 2013: Selected Oral Platform Presentations; Poster Session; Interactive Breakout Sessions; and Plenary Panel Discussion
            Closing Ceremony and Banquet

Venue: City of Bangalore, India

Bangalore (Bengaluru), the capital of the state of Karnataka is India's fifth largest and fastest growing cosmopolitan city i n Asia. It is also called India's Silicon Valley as it houses the major high tech industries in India and is one of the largest biotechnolo gy hubs in the country. Bangalore's Rs 63,800 crore (US$12.12 billion) economy (2008–09 Net District Income) makes it one of the major economic centers in India, with the value of city's exports more than (US$10 billion) in 2009. With an economic growth of 10.3%, Bangalore is the fastest growing major metropolis in India, and is also the country's fourth largest fast moving consumer goods (FMCG) market.

Bangalore, known as the garden city of India, is a gateway to southern India. The city's major tourist attractions include Th e Fort, Tipu Sultan's Palace, Cubbon Park, Ulsoor Lake, Bangalore Palace, Lal Bagh Garden, Jawahar La l Nehru Planetarium and various other attractions. Shoppers can stop on MG Road and do their shopping and after can find a number of pubs nearby. The city of palac es, temples, and gardens-Mysore is located at a distance of 135-km from Bangalore and is a 2-hour drive on the four lane Bangalore-Mysore highway. Bangalore experiences a tropical savanna climate with distinct wet and dry seasons. Due to its high elevation , Bangalore usually enjoys a more moderate climate throughout the year. The coolest month is January with an average low temperature of 15.1 °C (59.2 °F) and average high temperature of 27.0 °C (80.6 °F).

Government/Industry Sponsorship and Participation (Invited):

NIBIB, National Institutes of Health, USA
Department of Biotechnology, India
Siemens, India
Phillips, India
GE Medical Systems, India
IBM
Intel, India

WIPRO
TATA TCS
i2i Solutions
FORUS Health
IIT Khargpur, India
IEEE EMBS KP Student Chapter

Organized and Sponsored By:

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Piscataway, NJ, USA
Email Contact: d.bernstein@ieee.org
IIT Contact: mmaha2@gmail.com

ISCIT2012

The 12th International Symposium on Communications and Information Technologies (www.iscit2012.org) (October 2 - 5, 2012, Surfers Paradise, Gold Coast, Australia)

The submission deadline for regular and Special Session papers is May 7, 2012. The submission deadline for Workshop papers is 21 May 2012.

All papers submitted to regular technical sessions, Special Sessions and Workshops will undergo the same strict peer review and if accepted and presented at the conference, will be published in IEEE Xplore and indexed in the Elsevier Ei Compendex.

The conference will offer a Best Paper Award of A$1000. All papers submitted to the conference, including its regular sessions, Special Sessions and Workshops, will be eligible to be considered for the Award. The conference will also offer reduced student registration fees with paper registration and an exciting social program.

In addition to regular sessions, the conference will also include Workshops (http://www.iscit2012.org/workshops): "Cognitive Radio Workshop: The New Trends", "Emerging BAN Technologies", "QoE in Energy-Efficient Wireless Networks" and "Emerging Techniques in Video Analysis and Understanding for Surveillance Applications" and Special Sessions (http://www.iscit2012.org/special-sessions): "Middleware support for Internet of Things (IoT-Mid)" and "MIMO and Ultra-Wideband Communications (MIMO-UWB)".

The conference will also offer a range of state-of-the-art Tutorials (http://www.iscit2012.org/tutorials): Interference Alignment: A new look at Signal Dimensions in Interference Networks by Syed A. Jafar, University of California Irvine, USA, Heterogeneous Cellular Networks: WCDMA, LTE and Beyond by Mark C. Reed, Australian National University/UNSW, Australia, Wireless Body Area Networks by David Smith, National ICT Australia, Australia and Base Station Cooperation in Cellular Networks by Stephen Hanly, Macquarie University, Australia.

Under the joint technical sponsorship of the IEEE Circuits and Systems Society (USA), the joint Queensland Chapter of the IEEE Signal Processing and Communications Societies, the Institute of Electronics, Information and Communication (EIC) of Japan, the ECTI Association of Thailand and the Korea Information and Communications Society (KICS), the conference will provide a forum for researchers, engineers and industry experts to discuss recent development, new ideas and break-throughs in communications and information technologies. The theme of the conference is "Communications and Information Technologies for Sustainable Economy". The conference will also offer an exciting social program in Surfers Paradise in the beautiful region of the Gold Coast in Queensland, Australia.

Accepted papers will be included in the IEEE Xplore database and in the Elsevier Ei Compendex. The conference will assign a Best Paper Award among all the papers submitted to the conference. For more information and the submission process please refer to the conference website: www.iscit2012.org.

The technical areas of the conference include:

•COMMUNICATIONS SYSTEMS
•VLSI AND CIRCUITS AND SYSTEMS
•SIGNAL PROCESSING
•COMPUTER AND INFORMATION NETWORKS

TPC Chair: Prof. Y. Jay Guo
General Chair: Prof. Eryk Dutkiewicz
General Co-Chairs: Prof. Ian Oppermann,
Prof. Yoshi Miyanaga, Prof. Zhou Zheng, Prof. Kyung-Sup Kwak

Important Dates:
Paper Submission: May 7, 2012
Notification: July 16, 2012
Camera Ready Paper: August 6, 2012