

Vol. 9 No. 6 September 2014

Message from Chairman

Dear Members,

I am pained to see the status of the Student Branches in India circulated by Ms. Jamie. As per the report a large number of branches are not active and have not the submitted their annual reports to MGA. It is also noted that there is some duplication on student branch names. I request the Section Chairs to work to eliminate such happenings.



Shiban K Koul, Deputy Director (Strategy and Planning), Indian Institute of Technology Delhi and IEEE MTT-S Regional Coordinator R-10 has reported that IEEE MTT-S chapter under India council has technically co-sponsored a conference in Arya College, Jaipur without prior approval of the Regional Coordinator and IEEE MTT-S society. This is illegal. To uphold the highest standard of IEEE, we should carefully look into this and ensure that such violations are not committed by any IEEE volunteers in future. FURTHER Dr. Deepak Bhatnagar has been serving the chapter as Chair for many years which is not good for the health of the Chapter. Normally a chair is elected for a period of 2 years and in some cases he continues for 3 years. Deepak has been there for a very long time. I would like advise the members to discourage such happenings.

I would like to inform the Members that Region 10 Director, Toshio Fukuda has requested the eligible voting members of IEEE to cast their vote on time. The Region has announced an offer of bonus incentives of \$500, \$300, \$200 to the 3 Sections with the highest voting percentage accordingly. I appeal to all the eligible voting members to cast their Votes before 1 Oct 2014! Kindly note that the Ballots can be accessed electronically at www.ieee.org/elections.

The IEEE has announced IEEE Member and Geographic Activities (MGA) Awards. Each award has a unique mission and criteria and offers the opportunity to honor distinguished colleagues, inspiring teachers, and corporate leaders. If you know someone who has made substantial regional IEEE volunteer contributions through innovative projects, exemplary leadership, service, or by fulfilling the goals as related to transnational activities, consider nominating them for one of the following awards:

(1) MGA Larry K. Wilson Transnational Award, (2) MGA Innovation Award, (3) MGA Leadership Award, (4) MGA Achievement Award, (5) MGA Young Professionals Achievement Award. Please visit the MGA Award nomination web page to review the nominator guidelines and eligibility requirements. The deadline for nominations is 15 October 2014.

I am happy to note that the following projects are approved for the project grants by the Industry Relations - Region 10 (Asia Pacific):

1. Celebrating through Industry Day during October 2014 (8 grants of \$200)

Delhi Section : Innovations in Green Technology and its future.

Kerala Section : Industrial Visit

Kolkata Section : Industry – Institute Partnership:

Bangalore Section: Industry Day Celebrations

Note: Support is for conducting this event up to 50% of the actual cost or \$ 200 which ever is lower 4 more grants of \$200 pending. I request sections (large and small) to submit their their proposals.

2. Innovative Industry Engagements (5 grants of \$200)

Malaysia Section: Biometrics Security – Educating the end users

Kochi Subsection: Training on Engineering Project Management and Tools

Kerala Section: College to Corporate

Note: support for conducting this event up to 50% of the actual cost or \$ 200 which ever is lower

2 more grants of \$200 pending, I request sections (large and small) to approach me with their proposals.

My greetings to all the winners and best wishes for the aspiring applicants. Looking forward for your support and inputs in future.

M. Ponnavaikko

Chair, IEEE India Council

Words of Wisdom

If you have something to do that is worthwhile doing, don't talk about it, but do it.

After you have done it, your friends and enemies will talk about it.

- George W. Blount

Inventing is the mixing of brains and materials. The more brains you use, the less materials you need.

- Charles F. Kettering

Always walk through life as if you have something new to learn and you will.

- Vernon Howard

May you have the hindsight to know where you've been, the foresight to know where you're going, and the insight to know when you're going too far.

- Irish Blessing

NT Nair, Editor, writes,

R&D is considered the main driver of economic development by most countries. Well aware of its importance, countries led by U.S., China, South Korea, Germany, France, and U.K. have committed large sums for carrying out R&D, with major focus on applied research. India too is waking up, turning attention to productive research, from the earlier trend of working on basic research, mostly with government funding, and aimed at publishing papers, with no tangible benefit to the society or



common man. Of course, there is an exception: In space research, India has done remarkably well, with beneficial outcomes like telemedicine, and the recent *Mars Mission*, a significant landmark in Indian S&T landscape.

Here are some global indicators:

- Worldwide R&D spends reached an estimated USD 1,435 billion in 2011, which is the latest global total available.
- North America spent USD 424 billion in 2011
- With around 30 per cent of the above global total in 2011, the United States remains, by far, the world's largest R&D performer.
- China continues to exhibit the most dramatic R&D growth pattern these days.
- With USD 208 billion of R&D expenditures in 2011, China is the world's second-largest R&D spender.
- The growth in China's R&D spending has averaged an exceptionally high 20.7 per cent annually in 2001–11 period.
- India's figure was a mere USD 24 billion in 2007.
- After the United States and China, Japan with USD 147 billion is the third largest spender in R&D.
- R&D spending by South Korea has also been rising in recent years and accounted for four per cent (USD 60 billion) of the global total in 2011.

These figures have been highlighted here mainly to draw attention to the fact that the developed nations see R&D as the most important ingredient for their growth, and give all the impetus the stakeholders need for producing meaningful results: *Supportive policies, Funding, Handholding etc.*

India is now embarking on a most wanted 'Make in India' campaign, initiated by Modi government, to transform the country as a manufacturing hub, drawing inspiration from China, now considered as the 'Factory of the World.' If this initiative has to become successful, continuous flow of designs from our R&D labs has to happen. This requires nurturing of development efforts by private sector, with supportive gestures from government. Let us hope this would happen.

NT Nair



IT in August 2014

Prof. S. Sadagopan Director, IIIT-Bangalore s.sadagopan@gmail.com



General

- **Planning Commission**, the supreme decision-making body for six decades, goes into history on August 15, 2014
- Prime Minister dedicates guided missile vehicle of the Indian Navy **INS Kolkata** to the Nation on August 16, 2014
- On August 28, 2014 Prime Minister launched the new financial inclusion drive **Jan Dhan Yojana** that attempts to provide bank accounts to 75 millionpoor families, who still do not have a bank account; on the very first day 15 million bank accounts were opened! State Bank opened 2 million accounts. The Government plans to have RuPay debit card and Rs 30,000 Life Insurance built into this "zero minimum balance" account that will be used for direct benefit transfer
- In Commonwealth Games held in Glasgow during July 23 August 3, 2014, India finished at the 5th position (among the 7 Nations) with 64 medals, next only to England, Australia, Canada and Scotland
- India takes a tough stand in World Trade Organization (WTO) talks in Bali that concluded on July 31, 2014 but agrees to re-engage on August 1, 2014
- Asian Development Bank (**ADB**) agrees to give up to \$ 9 billion loan to India over three years
- Lok Sabha(Indian Parliament) passes Judges Appointments Bill on August 13, 2014
- Chennai celebrates 375th Foundation Day on August 21, 2014
- Yoga Guru BKS Iyengar— who managed to take Yoga to millions across the planet passed away at the ripe age of 95 after a brief illness on August 20, 2014; Richard Attenborough who directed the film Gandhi award-winning critically acclaimed film that had a profound impact on millions passed away at the ripe age of 90 on August 25, 2014

Technology

• On July 31, 2014, Danish scientists at Technical University, Denmark achieved a new record in communication -43 Terabits/second speed (5.5 Terabytes/second or transmitting the entire contents of 1 TB hard disk in one-fifth of a second), using single fiber specially made by NTT, Japan

Markets

- Indian currency takes the steepest fall (in six months) of 68 paisa in a day to 61.18 against USD on August 1, 2014
- **HP** is back to No 1 position in the Indian PC marketwith 29.5% market share (according to IDC) based on April June 2014 sales data
- Apple stock price crossed \$ 100 on August 20, 2014 (after seven-for-one stock split in July 2014)
- **HDFC Bank** is the most valued brand in India, as per the first-ever BrandZ exercise in India announced on August 20, 2014
- Amazon buys Video gaming company Twitch (that enables video gamers to allow others to watch the

game online) for \$ 970 million on August 26, 2014

Products

- Microsoft launches the most affordable Lumia 530 phone at Rs 7,000in India on August 13, 2014
- Amazon Point-of-Sale (PoS) terminal Local Register launched in USA on August 13, 2014, that would compete with the likes of Square, and allow smart-phones and Tablets to become a PoS
- Indian mobile handset brand **Intex Technologies** introduces open-source Mozilla-based smartphone **Cloud FX** at Rs 1,199 on August 25, 2014
- Flipkart launched five Intel processor-based WDigiFlip ProTablets in □ 5,999 to 15,999 price range on August 26, 2014 (on the heels of launching the first-ever Tablet launch by Indian e-Commerce major in July 2014)
- Alcatel launches OneTouch smart phones in India and expects to sell 500,000 units in 2014

Indian IT companies

- HLL, TCS, L&T, Sun Pharma, Bajaj Auto in the Top 100 World's Most Innovative companies (Forbes 2014)
- Indian handset major **Micromax** is selling more mobile phones in India today than Korean big-wig Samsung as per August 2014 data!
- Bangalore-based Analytics start-up **MuSigma** (founded by Dhiraj Rajaram) set to join the India-based companies in Billion Dollar club soon; its market value set to cross \$ 5 billion in August 2014
- Indian e-commerce company **Snapdeal** touches \$ 1 billion mark in 2.5 years in August 2014 (a year ahead of the original plan)
- Tata SIA Airline "Vistara" takes off on August 11, 2014
- NOIDA (Delhi) based e-waste company Attero gets 100 Crores funding in August 2014

MNC companies in India

- Made in India product, co-created by **SAP Labs India** with Tata Memorial Hospital in Mumbai"**Project Genomics**" with visualization and analytics tools for bio-informatics sector goes global in August 2014
- Microsoft decides to set up DataCenter in India in August 2014
- Honeywell plans to invest Rs 1,400 crores in its second campus in Bangalore
- Mercedes Benz India R &D Centre to have 50 data scientists soon
- Chinese handset major Xiaomi planning R & D unit in Bangalore

People

- Arun Murthy (key contributor to Hadoop), Surabhi Gupta (key contributions to search engine Airbnb), Swatee Singh (contributor for to American Express "My offers"), Vijay Subramanian (key contributions to Rent the runway) are four Indians the global list of 20, a maiden attempt by Fortune Magazine to chronicle the leaders in Big Data / Analytics
- Infosys new CEO Dr. Vishal Sikka starts his innings on August 1, 2014
- Prime Minister Modi visits Nepal during August 3-4, 2014
- Dilip Khandelwal takes charge as SAP Labs India Managing Director on August 5, 2014
- Steve Ballmer steps done from Microsoft Board in August 20, 2014

- Yoga Guru BKS Iyengar— who managed to take Yoga to millions across the planet passed away at the ripe age of 95 after a brief illness on August 20, 2014
- **Richard Attenborough** who directed the film **Gandhi** award-winning critically acclaimed film that had a profound impact on millions passed away at the ripe age of 90 on August 25, 2014

Education & Research

- Professor Manjul Bhargava of Princeton University wins Fields Medal(highest honour given to young mathematicians less than 40 years old) on August 13, 2014 for contributing "powerful new methods in the geometry of numbers"; Professor Subhash Khotin the Computer Science Department of New York University's Courant Institute of Mathematical Sciences) wins Rolf Nevenlinna Prize for outstanding contributions to mathematical aspects of Information Sciences including Computer Science; both the wineers are Persons of Indian origin
- Tatas give 95 crores to IIT Bombay Design Center in August 2014

Infrastructure

- Prime Minister dedicates 765 KV Solapur Raichur transmission line on August 16, 2014
- Mumbai Metro (Colaba Bandra Andheri line) sees ground breaking ceremony on August 26, 2014
- Government talks of 10,000 MW of wind energy every year for the next five years

Interesting applications

- **Mobile banking** sees increased traction; ICICI Bank alone posts \Box 2645 crores worth transactions in April June quarter (compared to \Box 5,741 crores transactions in the whole of the year 2012-13)
- OlaCabs taxi hailing App tweaks the process and gets average waiting time to 10 minutes!
- Government okays □1,00,000 crores **Digital India project** in August 2014; SIM card to be linked to AADHAR as part of this project
- Several telcos start offering SMS-based basic banking services in India using USSD; Prime Minister launches this as part of the larger financial inclusion initiative **Jan Dhan Yojana**

Interesting numbers

- **Telecom subscriber** base on June 30, 2014 stood at 942.95 million with 914.92 million mobile subscribers and 28.03 million wire-line subscribers (with net addition of 4.77 million mobile subscribers and net reduction of 0.16 million wire-line subscribers in June2014) (TRAI Press Release No. 53/2014 dated August 20, 2014)
- India's Foreign Exchange on August 22, 2014 was at \$ 318.6 billion (RBI)
- Indian Rupee stood at 60.58 against USD on August 29, 2014 (RBI)
- On Aug 29, 2014 **BSE Sensex** and **NSE NIFTY 50** (Indian stock market indices) were at 26,638 and 7,954 respectively (Reuters)
- Government talks of 10,000 MW of wind energy every year for the next five years
- Flipkart creates 400 crorepatis among employees, thanks to Employees Stock Options
- Half of TrueCaller's 70 million subscribers are in India
- WhatsApp active user base crosses 600 million in August 2014!
- Average speed on Bangalore roads drop from 35 Kmph in 2005 to 20 Kmph in 2010 and to 9 Kmph in 2014!

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Information Resources

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How Aadhaar linkage can destroy banks: Even if Aadhaar numbers were proof of identity, which it is not, its use to make money transfers make financial transfers un-auditable, propagate money laundering and financial fraud. There is no justification for introducing an unverified and un-audited number to allow payments and settlements. Read the full story at http://goo.gl/BQlB8R

Big Data: 15 tips for success: The Bangalore chapter of The Indus Entrepreneurs (TiE) recently (in May/Jun 2014) hosted a panel on Big Data. Cutting through the hype, the panel showed that Big Data is only getting bigger and bigger, both in terms of its application and the sheer amount of data processed. The five panellists included Anirban Dey (Andy), Managing Director, Sap Labs India; Vijaya Kumar Ivaturi, Co-founder & CTO, Crayon Data; Ranjith Menon, Sr. Vice President, IDG Ventures India Advisors; Pavan Sondur, CEO & Co-Founder of the startup Unbxd Inc.; and Venkatesh Vaidyanathan, Vice President, Business Analytics, SAP Labs. Here are the Top 15 tips from the panellists for companies looking to harness Big Data or startups looking to get into this space and find new opportunities. Find them at http://goo.gl/hEizR0

What is open education?: Open education is a philosophy about the way people should produce, share, and build on knowledge. Proponents of open education believe everyone in the world should have access to high-quality educational experiences and resources, and they work to eliminate barriers to this goal. Such barriers might include high monetary costs, outdated or obsolete materials, and legal mechanisms that prevent collaboration among scholars and educators. Promoting collaboration is central to open education. As the Open Education Consortium says: "sharing is probably the most basic characteristic of education: education is sharing knowledge, insights and information with others, upon which new knowledge, skills, ideas and understanding can be built." Read more about open education at http://goo.gl/W9wqUD

Book: Open Sources: Voices from the Open Source Revolution: By Chris DiBona, Sam Ockman. Publisher: O'Reilly Media. Pages: 284: Freely available source code, with contributions from thousands of programmers around the world: this is the spirit of the software revolution known as Open Source. Open Source has grabbed the computer industry's attention. Netscape has opened the source code to Mozilla; IBM supports Apache; major database vendors haved ported their products to Linux. As enterprises realize the power of the open-source development model, Open Source is becoming a viable mainstream alternative to commercial software. Now in Open Sources, leaders of Open Source come together for the first time to discuss the new vision of the software industry they have created. The essays in this volume offer insight into how the Open Source movement works, why it succeeds, and where it is going. For programmers who have labored on open-source projects, Open Sources is the new gospel: a powerful vision from the movement's spiritual leaders. For businesses integrating open-source software into their enterprise, Open Sources reveals the mysteries of how open development builds better software, and how businesses can leverage freely available software for a competitive business advantage. The contributors here have been the leaders in the open-source arena: Brian Behlendorf (Apache); Kirk McKusick (Berkeley Unix); Tim O'Reilly (Publisher, O'Reilly & Associates); Bruce Perens (Debian Project, Open Source Initiative); Tom Paquin and Jim Hamerly (mozilla.org, Netscape); Eric Raymond (Open Source Initiative); Richard Stallman (GNU, Free Software Foundation, Emacs); Michael Tiemann (Cygnus

Solutions); Linus Torvalds (Linux); Paul Vixie (Bind); and Larry Wall (Perl). This book explains why the majority of the Internet's servers use open-source technologies for everything from the operating system to Web serving and email. Key technology products developed with open-source software have overtaken and surpassed the commercial efforts of billion dollar companies like Microsoft and IBM to dominate software markets. Learn the inside story of what led Netscape to decide to release its source code using the open-source mode. Learn how Cygnus Solutions builds the world's best compilers by sharing the source code. Learn why venture capitalists are eagerly watching Red Hat Software, a company that gives its key product -- Linux -- away. For the first time in print, this book presents the story of the open-source phenomenon told by the people who created this movement. Open Sources will bring you into the world of free software and show you the revolution. Read this book online at http://goo.gl/kdylAv

Book: Open minded CEOs: Working the open source way isn't always easy. CEOs who strive daily to implement open source principles in their companies face some important — and difficult — questions: How can we bring people together to do great things? What motivates them? How can we coordinate them when they unite? How does working the open source way allow us to anticipate the future and adapt to thrive in it? And what counts as success?. This collection features CEOs from some of today's most intriguing companies. We call these leaders 'open-minded' because of their intuitive sense that the open source way is the best way to do business. You'll see what we mean. These authors are tireless champions of open source values in their organizations and their communities. Download this pdf version of the book from http://goo.gl/MyIWJ7

10 ways The Nature of Code is open: This fascinating book, "The Nature of Code" by Daniel Shiffman provides an introduction to using software tools to better understand the way things interact in nature. The author Shiffman employs animations and visualizations to create this joyful understanding of simulation and the world around us from a simple oscilating pendulum, to a group of many interacting particles, to the general patterns of a flock of birds. Read it online at http://goo.gl/x3aprS

Why The 3V's Are Not Sufficient To Describe Big Data: It is generally accepted that big data can be explained according to three V's: Velocity, Variety and Volume. In a 2001 research report, META Group (now Gartner) analyst Doug Laney defined big data as being three-dimensional, i.e. increasing volume (amount of data), velocity (speed of data in and out), and variety (range of data types and sources). Later in 2012 Gartner updated the definition of big data as high volume, high velocity, high variety. Although I do not want to diminish the importance of the definition by Gartner, I do think that big data can be better explained by adding a few more V's. These V's explain important aspects of big data and a big data strategy that organisation cannot ignore. Let's look at these V's and for completeness, let's also once more mention the common known V's: Read the full post at http://goo.gl/Lbp6dQ

Public Data: In 2011 European Commissioner Neelie Kroes put up a proposal to open up Europe's Public Data for everyone to use. Neelie Kroes is a strong supporter of the use of public datasets and she called governments to put online datasets that were created with public money. Also the United Stated sees many chances for public data. Obama launched a big data initiative worth \$ 200 million in 2012 to investigate the big data opportunities and technologies. Due to these initiatives, public datasets are becoming more widely available for organisations and that thrives innovation and new solutions for (unknown) problems in the world. More and more private initiative are being launched as well. These marketplaces collect public datasets and private datasets for organisations. Visitors can buy the datasets or download them for free. At some websites organisations can also sell their own datasets. Also Google and Amazon are developing big data marketplace, be it still in a relatively small scale. This section of BigData-Startups at http://goo.gl/OYEV2U is dedicated to these (public) initiatives and we will collect all websites / companies that make (public) datasets available. This is a ongoing in section as new websites are launched every day. So if you know of a website that is not shown here, please contact

us and let us know.

An Extensive Glossary Of Big Data Terminology: Big data comes with a lot of new terminology that is sometimes hard to understand. Therefore we have created an extensive Big Data glossary that should give some insights. Some of the definitions refer to a corresponding blog post. Of course this big data glossary is not 100% complete, so please let us know if there are missing terminology that you would like to see included. Download it from http://goo.gl/tWgR4X

6 biometric factors that are working today: Google "I hate passwords" and you'll get 3.25 million results. If that isn't unshakeable evidence that the world is desperate for a better solution, then I will tear up all those sticky notes pasted on my laptop. What's the alternative? I'm putting my money on biometrics. Yes, biometrics have been touted for a long time. But in recent years, the technology has overcome some major hurdles -- among them cost, ease of use, and access -- paving the way for some very interesting possibilities in authentication solutions that will (hopefully) relegate the despised password to the dustbin of history. Like any security technology, there is no perfect solution. But one thing is for sure, biometrics are no longer a futuristic fantasy. There are real solutions that are working today with even more on the horizon. Let's take a look at http://goo.gl/8dwVaa

The power of religion and prayer to head off climate disaster: Archbishop Desmond Tutu's prayer ahead of People's Climate March warns that the global economy is destroying the web of life. Read the post at http://goo.gl/XyZdmw

The spiralling energy consumption behind your smart phone: Researchers are trying to address the mobile telecom industry's dirty little secret by developing energy efficiency technology. Read the full story at http://goo.gl/mI5MIV

Personalising climate change through open data and apps: Government-released open data has generated a host of new climate-change related apps, the challenge is to make it clear and usable. Full story at http://goo.gl/qPxMMJ

How to build your own sustainable house: WikiHouse enables people to design and build their own flat-pack homes. Aimed at tackling challenges in both developed and developing markets, could this be the future of housing? Full post at http://goo.gl/447wOS

Breakthrough in rapid diagnostics: using magnets to test for malaria: Scientists in Singapore develop a quicker, cheaper and potentially more reliable way to improve diagnosis in rural areas. Full story at http://goo.gl/0jbzne

Why AI could destroy more jobs than it creates, and how to save them: Automation may be destroying jobs faster than it's creating new ones, but all hope isn't lost. TechRepublic spoke to MIT economist Erik Brynjolfsson on changing the course of the future. Full story at http://goo.gl/tHrAeq

IEEE Student Travel Grants: IEEE is pleased to offer a number of student travel grants to assist Student members in attending conferences and presenting papers. The IEEE Foundation and various Societies provide a host of opportunities for students to participate in workshops for training and educational purposes. For details visit http://goo.gl/4zggHC

The History of Tablet Computers: A timeline: Today's tablet landscape is dominated by Apple's iPad and Android devices from Samsung, Google and others, with Windows-based tablets from Microsoft and its partners making recent inroads on the market. But where did all these tablets spring from? View it at http://goo.gl/RGkMUU

The History of Wearable Technology: A timeline: Humans have always adorned their bodies with gadgetry — be it for show, for utility, or both. Our timeline documents examples such as body armour, spectacles, wearable calculating aids, hearing aids, diving gear, spacesuits, exoskeletons and experiments in human-machine 'cyborgs'. View it at http://goo.gl/zZudEu

20 awesome office gadgets and must-haves: With these gadgets and must-haves, you'll have everyone in the office wondering how so much win could possibly come from one person! Be the awesome you want your office to be. Know them at http://goo.gl/ukd2Lm

10 stress-relieving gadgets everyone needs: We all experience a fair share of stress in our lives, so why not arm yourself with a gadget or 10 to help reduce it when you do have to deal with it? These should help to get you started. Know them at http://goo.gl/Hm950P

Google Glass' amazing medical usages (Warning: You may end up missing an organ): Google's device can revolutionize teaching in the medical field and diagnostics in rural areas, but there will have to be usage rules so patients don't suffer. Read the story at http://goo.gl/tXYJj0

Top tech crowdfunding campaigns of the month: August 2014: What are some of the most innovative tech projects and ideas seeking crowdfunding on Kickstarter and Indiegogo this month? See them at http://goo.gl/7Z6wQF

You're going to need a bigger house: 500 connected gadgets in the home of 2022: Within a few years, the average consumer could need to manage over 500 connected things running in their homes according to analysts. So be careful where you sit.. Read the story at http://goo.gl/ypXW4y

IT jobs' big threat: Robots, automation; The solution: More humanity: For IT workers, the worry of becoming obsolete is constant. Toss in automation, robotics and artificial intelligence and many tech tasks won't need humans. Is there any wonder why IT is trying to learn more human and interpersonal skills to move up the food chain? Full story at http://goo.gl/2KVhQk

31 ways to improve your iPhone's battery life: Apple's latest iPhones pack as much power in as their predecessors, but not even nearly as much as their nearest competitors. By tweaking iOS 8, you can improve your iPhone's battery life considerably. Know them how at http://goo.gl/I3QPCu

Microsoft names the 10 startups participating in its home-automation accelerator: Microsoft is bringing 10 startups focusing on home-automation into its new home-automation accelerator starting this fall. Full post at http://goo.gl/fo9TBW

WW1 tech still in use today: Lots of the high tech gadgets and ideas we use today were developed for use in the Great War one hundred years ago. We round up the greatest technology inventions of WW1 which are still in use. Full story at http://goo.gl/eq5f2D

Can computers dispense consulting advice? It depends...: IBM's Watson employs artificial intelligence to help with high-level decisions. Very high-level decisions. Full story at http://goo.gl/zng2uc

High tech gadgets for the home of the future: The gadgets reaching the Electrolux design lab semi finalists show healthy environments for the future high tech home with smart design solutions. The top 35 semi-finalists of the Electrolux Design Lab 2014 competition have been chosen from over 1,700 submissions from around the world. They focus on creating a healthy home with categories for air purification, culinary enjoyment and fabric care. These concept gadgets are prime examples of what you might see in the home of the future. They focus on connectivity, bio-mimicry, robotics, wearable tech, recycling and reusing materials, all intended to promote healthy, sustainable lifestyles at home. The concepts are intended to make our everyday lives more efficient. View them at http://goo.gl/CkK9Fl

Google, IEEE launch \$1m 'Little Box' power inverter challenge: Google is offering \$1 million for you to come up with a compact solution for transforming renewable energy sources into something usable at home. Full story at http://goo.gl/t2yPrM

Why Entrepreneurs Should Listen to Alibaba's Jack Ma: Jack Ma's unique business model helped Alibaba become the massive company it is today. Full story at http://goo.gl/QY4S0H

Answers to TechQuiz-2014-08: Guardians of the Skies, Narendra Modi, Singer Shakira, Narendra Modi, 10%

IEEE India Info 10 September 2014

Artificial Mother of Pearl For Tougher Coatings

'Mother of Pearl' is an extremely beautiful, organic mineral created by living organisms like mollusks - Pearl oysters or abalones. These mollusks secrete fine proteins whose chemical compound is calcium carbonate, the same that is found in marble and aragonite.

Mother of pearl usually secretes calcium carbonate in extremely thin platelets or building blocks that are less than half a micro-meter in length. Generally white, and sometimes gray, it finds use in lots of high quality products - as part of tiles for flooring, for coating sinks and buttons on jackets and shirts, as an inlay in jewelry, furniture, hands for luxury watches and musical instruments.

Mother of pearl comes in several natural colors, and is often bleached and dyed for decorative use. The dye retains the shimmering layers. Two substances actually combine to create mother of pearls. The first is plates of aragonite, a material which is secreted by the mollusk. Aragonite contains calcium carbonate and conchiolin, a natural protein. Alone, the plates are very hard, but also very brittle. As a result, the organism also secretes organic material similar to silk to layer between the plates. The result is a strong, flexible material which can withstand hard use.

Recently, Cambridge University scientists have created an artificial version of mother of pearl that could be used as an aesthetic protective coating. They mimicked the way mother of pearl is created in nature to synthesise the strong, iridescent coating that is found on the inside of some molluscs and on the outer coating of pearls.

By recreating the biological steps that form nacre - the technical name for mother-of-pearl - in molluscs, the scientists were able to manufacture a material which has a similar structure, mechanical behaviour, and optical appearance of that found in nature.

The researchers led by Prof. Ulli Steiner, say: "Crystals have a characteristic shape that reflects their atomic structure, and it is very difficult to modify this shape. Nature is, however, able to do this, and through our research we were able to gain insight into how it grows these materials. Essentially, we have created a new recipe for mother of pearl using nature's cookbook... While many composite engineering materials outperform nacre, its synthesis entirely at ambient temperatures in an aqueous environment, as well as its cheap ingredients, may make it interesting for coating applications. Once optimised, the process is simple and can easily be automated."

[For details: http://www.wisegeek.com]



The Power of Uniqueness

Today, I asked my mentor – a very successful business man in his 70's – what his top 3 tips are for success. He smiled and said, "Read something no one else is reading, think something no one else is thinking, and do something no one else is doing.

[Sourced by: Susy Mathew]

Molecular-level Devices

Target Energy-efficient Electronics

A team of scientists from Tyndall National Institute in Cork, Ireland (named after John Tyndall, Scientist, one of Europe's leading research centres, specialising in ICT hardware research) and the National University of Singapore, have designed and fabricated ultra-small devices - based on molecules acting as electrical valves, or diode rectifiers - for energy-efficient electronics. It opens up a new avenue to exploit molecular design to achieve new ways to perform information processing. By finding out how molecules behave in these devices, a ten-fold increase in switching efficiency was obtained by changing just one carbon atom. These devices could provide new ways to combat overheating in mobile phones and laptops, and could also aid in electrical stimulation of tissue repair for wound healing. "Modern electronic devices such as telephones and tablets in manufacture today rely on tiny switches approaching molecular sizes. This provides new challenges for electronics but opens up exciting opportunities for blending molecular properties to be used to advantage", says Jim Greer, Tyndall Electronic Theory Group leader.

The results of the study show that simply adding one extra carbon is sufficient to improve the device performance by more than a factor of ten. These high-quality devices can suppress leakage currents and so operate efficiently and reliably. The device can be cleanly switched on and off purely on the basis of the charge and shape of the molecules, just like in the biological nanomachines that regulate photosynthesis, cell division and tissue growth.

(For details: http://www.physnews.com)



A Father's Advice

Today, my father told me, "Just go for it and give it a try! You don't have to be a professional to build a successful product. Amateurs started Google and Apple. Professionals built the Titanic.

Looking Back

Today, I interviewed my grandmother for part of a research paper I'm working on for my Psychology class. When I asked her to define success in her own words, she said, "Success is when you look back at your life and the memories make you smile."

A Door Closes to Open Another

Today at 7AM, I woke up feeling ill, but decided I needed the money, so I went into work. At 3PM I got laid off. On my drive home I got a flat tire. When I went into the trunk for the spare, it was flat too. A man in a BMW pulled over, gave me a ride, we chatted, and then he offered me a job. I start tomorrow.

[Sourced by: Susy Mathew]

IEEE NEWS

From Around India

IEEE UP Section

The 1st International Conference on Soft Computing Techiques for Engineering and Technology 2014(ICSCTET-2014), was organized by School of Computing and Department of Allied Sciences, Graphic Era Hill University, Bhimtal Campus, on August 7-8, 2014. The conference was organized under the aegis of **IEEE (UP Section) and CSI (Division I and Region I)**. The aim of the conference was to explore the horizons of Soft Computing for upliftment of human life. The International conference received a huge response, about 120 papers were presented and 292 abstracts were received for the conference. The success of the conference can be gauged from the fact that the very first conference organized at GEHU, Bhimtal campus, was attended by internationally and nationally renowned eminent scientists, scholars and researchers attended the conference.

The key note address was delivered by the internationally renowned scientist Prof.(Dr) V. Sree Hari Rao, IDRBT, Fellow-NAS California. In his key note address, Prof Rao highlighted the importance of Soft Computing in curing the diseases. He presented facts and figures through his paper namely, "Can Machine Learning Ease disability due to Infectious Diseases?". The International Conference was inaugurated and presided by Prof. (Dr.) Kamal Ghanshala, Hon'ble Chancellor, Graphic Era Hill University. The other eminent personalities included Prof. Malisa Zizovic, NIS, Serbia, Prof. Rale M. Nikolic, Serbia, Prof. S.L. Singh, UGC Emiritus Professor, Rishikesh; Prof. Amir Ahmad, King Abdul Aziz University, Saudi Arabia, Prof. Shamimul Qamar, Saudi Arabia, Prof. Durgesh Pant, UoU, Dehardun, Prof. M.C. Joshi, Nainital, Prof. J.C. Bansal, SAU, Delhi; to name the few. Prof. Sandeep K. Budhani and Dr. Navneet Joshi was the organizing secretary of this International conference.





IEEE WIE GLA University Student Affinity Group celebrated 20 years of IEEE Women in Engineering and Teachers' Day

IEEE Women in Engineering is an organization which exists to serve the needs of women, promote the women in engineering and inspiring girls to move in engineering. It is a great honour that IEEE WIE has completed its two decades (1994-2014).

On 5th September 2014, IEEE WIE GLA University Student Mathura Affinity Group in Uttar Pradesh Section, celebrated the 20 years of IEEE Women in Engineering and Teachers' Day by cutting the cake with our Head of the Department Prof. Anand Singh Jalal, WIE Faculty Advisor Dr. Dilip Kumar Sharma, WIE Student Affinity Group Chair Ms Bhavana Kaushik, Faculty members and the Group members. On this occasion everyone was celebrating the 20 years of inspiring, engaging and advancing women in engineering. And at the end of programme all members said the magical words "I CHANGE THE WORLD. I AM AN ENGINEER."



Report By:

Dr Dilip Kumar Sharma, Joint Secretary- IEEE Uttar Pradesh Section and Faculty Advisor, WIE GLA University Student Affinity Group, Mathura, India



ABES ENGINEERING COLLEGE, GHAZIABAD

IEEE INTERNATIONAL CONFERENCE ON COMPUTATIONAL INTELLIGENCE & COMMUNICATION TECHNOLOGY

(Technically sponsored by IEEE UP Section) 13-14 Feb, 2015

Chief Patron Sh. Ved Prakash Goel

Chairman, ABES-EC

Patrons:

Sh. Neeraj Goel

Secretary, ABES-EC

Prof. (Dr.) Surendra Kumar

Director, ABES-EC

Conference Chairperson:

Prof. R. G. Mendiratta,

Director (Acad.), ABES-EC

Conference Co- Chairpersons:

Dr. A.K. Sinha

Dean(R&D), HoD-IT, ABES-EC

Prof. Ajay Agarwal

Dean(Acad.), ABES-EC

Convener

Dr. R. Radhakrishan, HoD(CSE), ABES-EC

Organinsing Secreatry

Dr. Munesh C. Trivedi, Dept. of CSE, ABES-EC

INTERNATIONAL ADVISORY COMMITTEE

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Dr. Nishchal K. Verma

Secretary, IEEE UP Section

Dr. P.V. Virparia

Call for Papers

ABES Engineering College, Ghaziabad, one of the pioneer institutions in the field of Engineering, Research and Technology is organizing its 1st IEEE-International Conference on Computational Intelligence & Communication technology; CICT-2015 This technical conference aims at providing a platform for industry and academia to discuss various emerging trends and innovations, share research results and new directions in upcoming areas.

CICT-2015 will provide a leading edge, scholarly forum for researchers, engineers, and students alike to share their state-of-the art research and developmental work in the broad areas of pervasive computing and communications. The conference will feature a diverse mixture of interactive forums, core technical sessions of high quality cutting-edge research articles; targeted workshops on exciting topics; live demonstrations of pervasive computing in action; insightful keynote speeches; panel discussions from domain experts and posters of emerging ideas and achieve the following:

- •To present the ongoing researches in the field and hence to foster research relations between the Universities and the industry.
- •Give participants a review of the latest and upcoming trends in the next few years.
- •Exposing the audience to the need for more development and research in the field and with it the growing need for IT security.
- •Provide the delegates to share their new ideas and the application experiences face to face.

We invite you to submit papers and also request you to disseminate this CFP to your colleagues and communities. Authors are cordially invited to submit papers through on line paper submission process (Easy Chair submission system) before 31st July, 2014. Research contributions are solicited in all areas pertinent to the conference theme and including the following:

COMPUTATIONAL SCIENCE & ENGINEERING

Intelligent and Bio-inspired Computing, Distributed and Parallel Computing, Multi-core and GPU Computing, Database and Data Mining - Cluster, Grid, P2P and Cloud Computing - Mobile Computing - CSE Education - Scientific and Engineering Computing - Embedded and Ubiquitous Computing - Advanced Networking and Applications - Security, Privacy and Trust - Service and Internet Computing - Dependable, Reliable and Autonomic Computing - CSE applications (bioinformatics, global optimization problems, computer graphics and multimedia, data mining, signal and image processing, etc)

COMMUNICATIONS & NETWORKING

Channel measurements and modeling - Coding and modulation techniques - OFDM technology - Cognitive Radio - Antennas and propagation - MIMO - theory and trials - Spread Spectrum and CDMA systems - Space-time coding,

Director,Sardar Patel University,VV Nagar, Gujrat

Dr. Sanjay Mishra

Professor, Covenant University, OgunState, Nigeria

Dr. Yasser Mahfooz

King Saud University, Saudi Arabia

Prof. (Dr.) D.B. Choksi

Professor, Sardar Patel University, VV Nagar, Gujrat

Dr. Rakesh Gupta

Senior Technical Director, NIC, New Delhi, India

Mr. ShekharSanyal

Country Head (India) IET, UK

Dr. S. Pal

President, IETE

Dr. S. V. Raghavan

President, CSI,India

Dr. S.K. Gupta

Professor, IIT, Delhi

Dr. R.K Agarwal

Professor, JNU, India

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Dr. Bijendra Agrawal

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Dr. TarunShrimali

Principal, Career point technical campus, Rajsamand (Rajasthan)

Ultra Wide-Band Communications - Broadband Wireless Access, Next-generation Networks, Secure communications - Mobile ad-hoc, Mesh, Cooperative, Sensor Networks - Home networking -Cross Layer Design - Embedded Internet devices â "New and enhanced services - Resource and information management - Adaptive QoS provisioning - End-to-end QoS - Optical Communications and Networks

POWER & ENERGY

Power Quality - Smart Grids - Design, Control and Management â "Demand Response â "Advanced Metering Infrastructure â "Interoperability Standards - Home Energy Management Systems â "Protection - RAM (Reliability, Availability, Maintainability) - Grid integration of renewable energy source - plug-in electric vehicles - co-energy - distributed generation - efficiency and conservation - Solar energy - Hydro energy - Wind energy - wind turbines - Ocean energy: tidal and wave -Biomass, Biofuels - Energy Harvesting - other alternative and renewable means of power generation

SIGNAL PROCESSING & VLSI

Signal Processing Algorithms & Architectures - Smart antennas and tracking algorithms â "Signal separation & identification - Adaptive and Array Signal Processing - Audio, Speech, Image & Video Signal Processing - Underwater Communications and Signal Processing - VLSI for Communication & Signal Processing - Non-linear and Biomedical Signal Processing â "Spoken Language Processing - Unconventional Applications of Signal Processing - Compressive Sensing and Applications - Detection and Estimation Techniques - Emerging Trends in VLSI - Nanoelectronics -MEMS, VLSI Circuits and Systems - Field-programmable and Reconfigurable Systems - System Level Design - System-on-a-Chip Design - System Issues in Complexity â "Low Power, Heat Dissipation - Power Awareness in VLSI Design - Test and Verification - Mixed- Signal Design and Analysis - Electrical/Packaging Co-Design

INTERDISCIPLINARY & HUMANITARIAN ENGINEERING

Disaster management - Distributed Generation & Communications Solutions for Isolated - Communities, Solutions for the Differently-abled - Space Applications for Development - Preventive Humanitarian Action - Environmental Engineering - Climate Change Mitigation & Adaptations - Sustainable Energy Use -Education Technologies - Enabling Technologies for Human Development - Engineering for Common Property Resources (Agriculture, Forestry, Fisheries) - ICT use in Social Development, Biomedical and Medical Technologies Logistics & Transportation Engineering, Water Resources Management, e-Waste engineering.

Instructions for Authors

- 1. Original papers based on theoretical or experimental works related to the above mentioned sub themes are solicited for presentation in the conference.
- 2. The paper should begin with title, short abstract and a list of keywords. Simultaneous submissions (papers already submitted to other conferences/journals) are not allowed.
- 3. All authors must follow IEEE formatting instructions.
- 4. Please do not submit plagiarized papers.
- 5. The total length of the paper must not exceed six A4 size pages including

Technical Committee Chair Dr. S. K. Garg

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Professor AurelVlaicu University, Romania

Dr. Yu-Chen Hu

Professor

Providence university, Taiwan

bibliography and appendices. Paper must be in PDF format.

All the papers should be submitted through on-line paper submission process (Easy chair submission system). Authors are requested to follow paper submission link on website.

https://www.easychair.org/conferences/?conf=cict2015

Technically Co-Sponsored by IEEE UP Section.

IEEE Conference record number -34505

Link:

http://www.ieee.org/conferences events/conferences/conferencedetails/index.html?Conf ID=34505

All accepted & presented papers of the Conference by duly registered authors, will be submitted to IEEE Xplore Digital Library for Publication.

REGISTRATION

Registration forms are available on website cict.abes.ac.in

Registration fees may be paid through demand draft/pay order in favour of "ABES Engineering College, Ghaziabad" payable at Ghaziabad.

Category	Early Bird registration Between 15 th Oct-15 th Dec 2014			Regular registration Between 15 th Dec 14 15 th Jan,15		
	Indian Author	Others	Indian Author	Others		
Member IEEE	Rs. 5400	\$180	Rs. 6000	\$200		
Non Member	Rs. 8100	\$225	Rs. 9000	\$250		
Students IEEE Member	Rs. 2700	\$140	Rs. 3000	\$150		
Students Non IEEE Member	Rs. 4500	\$150	Rs. 5000	\$175		
Institute Registration (Two persons)	Rs.13500	\$500	Rs.15000	\$500		
Industry (single)	Rs.9000	\$360	Rs.10000	\$400		

VENUE OF CONFERENCE:

ABES Engineering College, Ghaziabad

IMPORTANT DATES

- Paper Submission deadline :31st September, 2014
- Notification of Acceptance : 15thOct 2014
- Camera ready Paper Submission Deadline: 15th Nov 2014
- Last Date of Registration: 15th Dec 2014

Conference website: http://www.cict.abes.ac.in

I also request you to kindly forward this Call for paper to all your colleagues,

peers and research students.

Thanks & Regards,

Dr. Munesh Chandra Trivedi

M. Tech.(CSE), Ph.D.(CSE), LMCSI,SMIEEE,MACM,SMIACSIT Executive Committee Member & convener of IEEE, UP-Section Executive Committee Member of IEEE Computer Society, India Council

Organizing Secretary, IEEE-ICICT-2015

Sr. Associate Professor, Dept. of Computer Science & Engineering. ABES Engineering College, Ghaziabad

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Webpage: https://sites.Google.com/site/profdrmuneshchandratrivedi

E-Mail: munesh.trivedi@gmail.com, munesh.trivedi@abes.ac.in

Goodness and Gratitude

Today, after a 72 hour shift at the fire station, a woman ran up to me at the grocery store and gave me a hug. When I tensed up, she realized I didn't recognize her. She let go with tears of joy in her eyes and the most sincere smile and said, "On 9-11-2001, you carried me out of the World Trade Center."

[Sourced by: Susy Mathew]

IEEE Kerala Section

IEEE Kerala Robotics and Automation Society Inauguration



The Robotics and Automation Society Chapter of IEEE Kerala Section was Inaugurated on the 3rd of August, 2014 by Sri. M Sharifulla, IAS, Director, Kerala State IT Mission in the august presence of Dr. Prahlad Vadakepat, National University of Singapore, Mr. Srinivasan R, Chair Kerala Section and Mr. Rejin Narayanan, CEO Ingen Robotics and Interim Chair, Kerala RAS. A Distinguished Lecture by Dr. Prahlad enlightened the audience with future trends in Robotics. An exhibition of various student developed robots was also organized, whom were advised by both Dr. Prahlad and Mr. Regin on how to fine tune and develop the prototypes further.

KITeS 2014 by IEEE LINK, Kerala Section

KITES (Kerala IEEE TEchnical Symposium) the Kerala LINK flagship events 2014 edition was hosted at Rajiv Gandhi Institute of Technology, Pampady during 15th – 17th of August, 2014. Workshops on Android-controlled Arduino, Ethical Hacking, PIC and PICAXE, Unity Game Engine, CATIA and Matlab were held. A 24 hr Hackathon, sponsored by Mozilla Firefox was also organized. The event had a participation of over 600 student members from close to 30 student branches in Kerala.





Kerala Professional Activities Society

IEEE Professional activities focuses on professional enhancement of members of both industry and academia by addressing the core issues and tries to bridge the gap between them, there by fostering the overall development of Engineering in the true sense. During the month of August, IEEE Kerala Professional activities conducted two hands-on training workshops.

Web-e-Philian- Two day workshop on Web Development and Hosting

Web-e-philian was aimed at creating awareness about how the things students are studying and those teacher teaches is being applies in the industry. It was actually a college to work like transformation feeling aroused among the participants. In the beautiful campus of Mohandas College of Engineering 52 participants (IEEE members), in these two days were exposed to various coding styles and techniques in the real world out from the classrooms in the most enjoyable way.

Srishti - Two days' workshop on application development and posting @ IEEE HQ, Kerala Section

In this new segment where student turning to entrepreneurs giving lessons to the student community in a novel way with teaching basic skills and expertise that will get them a place in the corporate world of design and development using web applications was the key. This was primarily aimed at boosting the student's confidence in doing a start-up with their own ideas and how to establish themselves in the world of web app development. This time –since we are celebrating WIE year, the participants were all Women in Engineering members from LBSITW, SCT Papanamcode, and MCET Trivandrum. All 65 participants left the second day with a website of their own and many prizes distributed during the workshop.



News from Malabar Sub-Section

- 1. <u>Series of 'R10 WIE fu</u>nded Workshops on Linux' organized jointly by Women In Engineering Affinity Group of IEEE Kerala Section & IEEE Malabar Subsection
 - 1. Women in Engineering Affinity Group of IEEE Kerala Section in Collaboration with IEEE Malabar Subsection organized hands on workshop on Linux on 23 August 2014. This workshop was at *MEA Engineering* College, Malappuram Kerala. It was supported by IEEE R10 WIE funded project for IEEE Malabar Women Empowerment. The expert team from NIT Calicut led my **Ms Zeyana Anoob** conducted the program. **Dr Mija S.J** (Vice Chair, WIE Affinity Group, Kerala Section) coordinated this program. **Er Nandakumar.R** of IEEE MSS served as the co-coordinator
 - 2. Second Workshop on the Linux will be conducted at **AWH College of Engineering Calicut**, Kerala on **30 August 2014**
 - 3. Third workshop in this series will be organized at **KMCT College of Engineering Kozhikode**, Kerala during **September 2014**

2. Invited Expert Talk on Estimation Techniques

IEEE Malabar Subsection hosted an Invited Expert talk on **Estimation Techniques for Communication & Signal Processing**, as part of the National Conference on National Conference on Signal and Image Processing (SIP 2014) at Vimal Jyothi Engineering College, Kannur, Kerala on **23**rd **August 2014**. **Dr Sameer SM** (Associate Professor of NIT Calicut & Treasurer of IEEE Kerala Section) was the speaker.

3. Invited Lecture 'Data Compression- A primer'

IEEE Malabar Subsection hosted an Invited Lecture on **Data Compression Techniques**, as part of the National Conference on National Conference on Signal and Image Processing (SIP 2014) at Vimal Jyothi Engineering College, Kannur, Kerala on **23**rd **August 2014**. **Er Nandakumar.R** (Scientist of NIELIT Calicut & Secretary of IEEE Malabar Subsection) was the speaker.

4. IEEE Awareness Talk & Membership Drive @ NIELIT Calicut

IEEE Malabar Subsection organized a IEEE Awareness talk at **National Institute of Electronics and Information Technology (NIELIT) Calicut** on 21 August 2014. This was followed by a membership drive and arrangements are being made to initiate an IEEE Student branch, there. **Er Nandakumar.R** (Scientist of NIELIT Calicut & Secretary of IEEE Malabar Subsection) served as the resource person

IEEE SPICES

Call For Papers

IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES 2015)

An International Conference by IEEE Kerala Section and National Institute of Technology Calicut (NITC)

Date: February 19-21, 2015

Venue: National Institute of Technology Calicut (NITC), Kozhikode(Calicut), India

Conf. URL: http://ieeespices.org

We cordially invite you to submit your recent research papers to the International Conference on "Signal Processing, Informatics, Communication and Energy Systems (SPICES)" to be held at Kozhikode, Kerala, India. It is intended to be a forum for technical exchange amongst researchers from academia, research laboratories, and industries in various emerging fields of Signal Processing, Communication, Computer Science, Power Systems, Power Electronics and Control Systems spanning across six tracks. The technical program includes keynote lectures, plenary lectures, regular technical sessions, and special sessions.

Important Dates

Last date for paper submission :September 15, 2014

Acceptance notification: November 15, 2014

Last date for camera ready copy submission: December 15, 2014

The conference will be conducted in six parallel tracks. Topics of interest in each track include, but not limited to, the following:

Track 1: Communication & Networking: Antennas and propagation, Cross-layer designs, Cognitive radio systems and networking, Green communication, Distributed resource allocation and scheduling, Mobile ad-hoc networks, Modulation, Coding and Diversity, Multicarrier Communication Systems, Next generation networking and wireless systems, Routing protocols and QoS scheduling, Cooperative communications, Secure communications and Cryptography, Space-Time Codes, MIMO and Adaptive antennas, Underwater wireless communications

Track 2: Signal Processing: Audio, Speech, Image & Video signal processing, Signal processing for communications, Sparse signal processing, Human-computer interfaces, Remote sensing, Array processing, Multidimensional signal processing, Wavelets and Filter banks, VLSI signal processing systems., Non-linear and Biomedical Signal Processing, Learning theory and Pattern recognition

Track 3: Power System & Power Electronics: Distributed generation, Microgrid and Smart grid, Power system modeling and simulation, Power system planning and operation, Power quality and FACTS Technologies, Energy conversion techniques, Power electronics and Drives, Modeling, Simulation and

Control of power converters, Power converters for Renewable Energy Systems, Power semiconductor switches and soft switching, DC/DC converters

Track 4: Instrumentation & Control: Adaptive/Robust systems and control, Aerospace / Flight Control and Surveillance systems, Biomedical instrumentation and control, Emerging control theory and applications, Fractional order systems and control, Hybrid systems, Intelligent control and instrumentation, Process control and industrial automation, Robotics and automation, Sensors and instrumentation systems

Track 5: Theoretical Computer Science & Software Systems: Algorithmic information theory, Computability theory, Cryptography, Theory of computation, Analysis of algorithms, Mathematical logic and Formal languages, Type theory, Compilers, Programming languages, Operating systems, Database systems, Computer architecture, Computer networks, and Information security

Track 6: Applied Computing & Big Data: Image processing, Pattern recognition, Big data, Data mining, Artificial intelligence, Natural language processing, Computer vision, Computer graphics, Cloud computing, Distributed computing, Bioinformatics, Semantic web, Software engineering, Web technologies, E-Learning and E-Governance

Submission Guidelines

Prospective authors are invited to submit full papers (maximum of 5 pages in IEEE conference template) in PDF format. The IEEE conference paper template can be downloaded from the link http://www.ieee.org/conferences_events/conferences/publishing/templates.html. All papers must include title, complete contact information of all the authors, abstract and key words on the first page. Papers are to be submitted through EDAS conference management system using the link http://edas.info/N18359. All the accepted and presented papers will be included in the conference proceedings and archived in IEEE Xplore digital library.

Please see the conference websitehttp://ieeespices.org for more details.

Please Contact the following address for more enquiries: IEEE SPICES Secretariat Department of Electronics and Communication Engineering National Institute of Technology Calicut NIT Campus (PO), Calicut Kerala State, India PIN 673 601

Direct your questions to the Organizing Chairs, Sameer S. M. (sameer@nitc.ac.in), S. D. Madhukumar (madhu@nitc.ac.in) and Rijil Ramchand (rijil@nitc.ac.in) or to the Conference Secretariat (ieeespices@gmail.com)



IEEE Madras Section

2nd IEEE R10 Humanitarian Technology Conference

The 2nd IEEE Region 10 Humanitarian Technology Conference (IEEE R10 HTC 2014) was successfully conducted by IEEE Madras Section from August 6 – 9, 2014, at the Hilton Hotel, Chennai. The conference was attended by Dr Howard Michel, IEEE President Elect 2015, Dr Toshio Fukuda, IEEE R10 Director, Mr K Ramakrishna, IEEE R10 Director Elect 2015, Dr Takako Hashimoto IEEE R10 WIE Chair, Mr Deepak Mathur, IEEE R10 SIGHT Chair, Prof VS Subrahmanian IEEE R10 HTC 2014 Program Chair and Prof University of Maryland, USA, Prof Romain Murenzi Program Co-Chair and ED The World Academy of Sciences, Trieste, Italy, Prof Krithi Ramamritham, Program Co-chair and Prof IIT Bombay and an array of keynote speakers and participants.

The conference focused on technology developments, research opportunities and solutions to humanitarian problems in Energy, Water, Urban Development, Ocean Technology, Healthcare, Agriculture, Education, Communication, Disaster Management and Terrorism. In addition special sessions on IEEE Community Solutions Initiative, Women in Engineering and Student paper, project and poster contest was also held.

The conference was sponsored by IEEE Madras Section, Tata Consultancy Services Ltd., IEEE SIGHT, IEEE R10, IEEE India Council, SWELECT, Sri Eshwar College of Engineering and Sri Shakthi Institute of Engineering and Technology.

The 1st IEEE R10 HTC 2013 was held in Sendai Japan. Dr Tomonori Aoyama, Organizing Chair of that conference attended the IEEE R10 HTC 2014 conference at Chennai.

More details of the conference can be found at

http://www.ieeer10htc.org/index.php

https://www.facebook.com/IEEER10HTC

Twitter - #r10htc2014

T.S.Rangarajan

Conference Chair – IEEE R10 HTC 2014

Note: The 1st IEEE R10 HTC 2013 was conducted at Sendai Japan last year.

Innocence

Today, in the cutest voice, my 8-year-old daughter asked me to start recycling. I chuckled and asked, "Why?" She replied, "So you can help me save the planet." I chuckled again and asked, "And why do you want to save the planet?" "Because that's where I keep all my stuff," she said.

[Sourced by: Susy Mathew]



SRI SAIRAM ENGINEERING COLLEGE SAI LEO NAGAR, CHENNAI-44.

EVENT TITLE	i - VISION	SUBMITTED (29/07/2014	
EVENT DATES	22 nd & 23 rd July, 2014	TIMINGS		00 AM to 0 PM	
LOCATION	RCM HIGHER SECONDARY SCHOOL, CHENNAI				
REPORT BY	SATISH KUMAR .S, ECE/IV YEAR IEEE STUDENT BRANCH CHAIRMAN				

SUMMARY OF ACTIVITY

'i – VISION' was an outreach programme towards society conducted by the IEEE STUDENT BRANCH of Sri Sairam Engineering College. The objective was to offer advices and to enlighten the senior students of RCM HIGHER SECONDARY SCHOOL on the options they have after their graduation from schooling. The programme also aimed at teaching these students, some of the qualities that a graduate is expected to possess.

CONTEXT OF THE ACTIVITY

A set of 55 IEEE student members of our college volunteered to take part in this two day outreach programme. We were split in two batches under the guidance of Ms S.Brindha,IEEE Student Branch Counselor over the two days. The programme consisted of five major activities as follows:

- Seminar on the possible aspects of higher education
- Computer classes covering topics on basics of MS office, programming and proper use of the INTERNET.
- A mini project expo to motivate students' interest towards engineering fields.
- Sessions on computer assembly.
- Demonstrations on safe house wiring.

213 students from RCM Higher Secondary School participated in this two day programme. All five activities were held simultaneously to cater the strength of the school students. The student volunteers from EEE took over the proceedings in "Safe house wiring" while a few students from the department of ECE took over the mini project expo. The rest of the activity was split among the remaining student members of ECE and that of CSE. While the children had a lot to learn from us, student volunteers, we in turn had the opportunity to step into the shoes of teachers and gain new experience out of it, for which we are grateful. At the end of the two day programme a valedictory function was held to honor the Head Mistress of the school and one of the supporting staff for their assistance. We also provided all

213 students with dictionaries (Tamil to English) to help them in their vocabulary. On behalf of the entire Student Branch of Sairam I wish to extend our gratitude to our management and to our Principal for their continued support and encouragement.









Sri Sairam Engineering College Sai Leo Nagar, West Tambaram, Chennai-44.

IEEE SSEC Student Branch –ACTIVITIES FOR THE YEAR 2014. First IEEE SB meet-19thFebruary, 2014.:AWARENESS PROGRAMME

Present: IEEE SB counselor Ms. S.Brindha and all IEEE SB members from the department of ECE, CSE and EEE.

<u>Materials Used</u>: IEEE SB meeting kit from Singapore (provisional sample from IEEE R-10).

Topics Covered:

- Introduction and start up to IEEE by Asif Jalaludeen .S (ECE-A III year).
- Directions to use the IEEE portal and digital library by Satish kumar .S (ECE-C III year).
- IEEE STANDARDS and SPECTRUM by Anoop Monish .CH (ECE-C III year).
- Student member benefits and SB awards by Hemanth Kumar.K.R (ECE-B III year).
- Student networking and SB visions for the year 2014 by Monesh .M (ECE-C III year).
- More on IEEE, networking and volunteering aspects by Ganesh .S (ECE-A III year).

Abstract:

The session was headed by the Student Branch Counselor Ms. S.Brindha, AP-department of ECE. Topics were covered as specified above, based on the IEEE All India Student Congress held at Amrita University, Coimbatore last year (Oct 3rd-5th). The members that attended the meet on 19th February, 2014 include both II years and III years of ECE, CSE and EEE. Volunteers took about two and half hours to explain the various aspects of IEEE and their experiences from the congress. A small quiz was held to keep the members interested and IEEE goodies were given to the one's that got the answers right. The response for the meeting has been good as more members have come forward to attend events hosted by the Madras section this semester. By the end of the meeting student coordinators for the departments of CSC and EEE were elected to work with the remaining volunteers of ECE. On behalf of the student community I would like to thank the management and the department of ECE for having provided us with this opportunity.

Reported by: Satish Kumar .S (ECE-C IV year) – IEEE – Student Branch Chairman Monesh .M IEEE – Student Branch volunteer ,SEC.



2013 IEEE Member-Get a-Member Section Award (22nd Feb 2014)

MAIL INFORMATION:

I am pleased to inform you that your exceptional recruiting efforts in the IEEE Member-Get-a-Member (MGM) program during 2013 have earned the Madras Section an additional award of \$1000. You were the first place recruiter in the Asia and Pacific Region. The Section awards were created as a way to further encourage participation in the MGM program, and to help underwrite the Sections' local programs and activities. As such, the top five MGM recruiters in each Region earn an additional award for their local Section. Your Section will receive these funds within 2-3 weeks. On behalf of IEEE Member and Geographic Activities, I extend a warm thank you and congratulations, and encourage your continued participation in the IEEE Member-Get-a-Member program.

Regards, Denise

Denise Maestri Membership Marketing Program Manager IEEE Member & Geographic Activities 732 562-5530 d.maestri@ieee.org

REPORT ON IEEE ASIA PACIFIC REGION -10 TOP RECRUITER AWARD: AGM MEET: 22.02.2014

It gives us great joy and pleasure to see the hard, tireless work put in by our IEEE SB Coordinator Ms.S Brindha, bear fruit. Her exceptional efforts to recruit members have earned the Madras section an award of 1000\$ cash prize through IEEE Member-Get-a-Member (MGM) program. She bagged the first place as the top recruiter in the Asia and Pacific region. It is to be mentioned that top 5 recruiters in each region earn this additional award for local section, to help underwrite the sections local programs and activities.

Reported by: S.Srinath, IEEE Volunteer, SEC, <u>srinaths93@ieee.org</u> S.Ganesh, IEEE Volunteer, SEC,







SEMINAR ON WIRELESS BROADBAND NETWORKS

(26th June 2014)

The Program was inaugurated by Dr C.V.JayaKumar, Principal ,Sri Sairam Engineering College Prof,A.R.Rajini,HOD/ECE Welcomed the gathering . Mr.V.Sakthivel - Sub Divisional Engineer of Rajiv Gandhi Telecom Training Center was the Chief Guest. A presentation was given by him on "Recent advancement in Broadband Technologies and Wireless sensor Networks". He talked about the current scenario in the world regarding Broadband with statistical data. He explained about the WiMax and Wi-Fi technologies and the challenges faced by the wireless communications. He also highlighted the key features of Long Term Evolution (4G) and MIMO technologies. The experiences that were shared by him helped the Students in gaining more knowledge about the Broadband Networks. He also shared the success story of being placed in Rajiv Gandhi Telecom Training Centre. Finally the Students had got cleared with all their queries and the student with best queries was remunerated with IEEE goodies by the host. Vote of Thanks was proposed by IEEE Student Branch volunteer S.Venkatesh.

Reported by: S. Venkatesh, Venkatesh. S. V@ieee.org





SEMINAR ON KAIZEN ROBOTICS PROGRAM (15th July 2014)

IEEE SB of Sri SaiRam Engineering college conducted a seminar on KAIZEN ROBOTICS program. Mr.Nivas Ravichandran, an active IEEE volunteer coordination committee member for IEEE Region 10, who has conducted more than 100+ events under IEEE was the chief guest. He had a great interaction with the students of III year. He gave a detailed idea about the usage and role of ROBOTS in our day-to-day life. Students were also shown various videos about the working and role of robots in automobile, food processing and many other industries. He also shared his vast knowledge in the field of robotics and many newly invented robots for lot many purposes. The seminar was really interactive, interesting and kindled the interest of the students on Robotics. Nivas also motivated the students to utilize the IEEE membership for their self development in the technological field.

Reported by:

Ms. Jasmine Jenny Bala, Ms Lakshmi Balaji, II YR ECE, IEEE Volunteer, SEC

SEMINAR ON VEDIC MULTIPLICATION (26th July 2014)

We had a informative seminar on "VEDIC MULTIPLICATION" was delivered by Prof. Augusta Sophy Beulet P, School of Electronics Engineering, VIT University, Chennai. The chief guest was honoured by Prof S.Brindha, Student Branch Counselor. The seminar provided a general idea about the arithmetic operations on pattern logic with real time examples also discussed how these kind of algorithms are implemented in hardware. She stated that these kind of pattern logic operations are far more efficient to implement than the conventional method. She also proposed that there are sixteen sutras in Vedic multiplication and the importance of implementation of such algorithms in complex calculations.

Report by: S.Asif Jalaludeen, IEEE SB – Secretary. asif.a.j@ieee.org





S.Brindha, SB Counselor, Sri SaiRam Engineering college, Chennai-44







INDICON 2014

Emerging trends and innovation in Technology

11th-13th December 2014, Yashada, Pune, India



IEEE INDICON 2014 organized by IEEE Pune Section will be held at YASHADA, MDC, Pune, Maharashtra, India from December 11-13, 2014.

INDICON is the most prestigious conference conceptualized by IEEE India Council in the field of Electrical Engineering, Electronics and Communication Engineering and Computer Science and Engineering, in general.

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- Information and network security
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- Software and Database System

The paper submission deadline is June 25, 2014.

For Call for papers, please visit http://www.indicon2014.in/CFP.pdf.

For more details and contact information, please visit http://www.indicon2014.in

Rajesh Ingle,

Chair, IEEE Pune Section

General Chair INDICON 2014

ingle.rb@gmail.com



Words of Wisdom

Great opportunities to help others seldom come, but small ones surround us every day.

- Sally Koch

If you enter this world knowing you are loved and you leave this world knowing the same, then everything that happens in between can be dealt with.

- Michael Jackson

Fortunately analysis is not the only way to resolve inner conflicts. Life itself still remains a very effective therapist.

- Karen Horney

Books are the quietest and most constant of friends; they are the most accessible and wisest of counselors, and the most patient of teachers.

- Charles William Eliot

It is easy to hate and it is difficult to love. This is how the whole scheme of things works. All good things are difficult to achieve; and bad things are very easy to get.

- Rene Descartes



IEEE To India Info

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