

## Chairman's Message



**Dr. S. Salivahanan**  
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Dear friends,

At the outset, let me wish all our member  
A Happy New Year 2009.

Let me congratulate Prof. Ashok  
Jhunjhunwala, IIT Madras, for being elevated to  
the position of IEEE Fellow, from 01 January

2009. Hearty Congratulations!

I also congratulate IEEE Oceanic Engineering Society, India Chapter, IEEE Madras Section and Affinity Groups of WIE and GOLD for organizing a special lecture on "Advances in Underwater Vehicles" by Dr. Sergey Sukonkin, Head of Dept. of Underwater Vehicles, Experimental Design Bureau of Engineering, Russian Academy of Sciences, Russia, on 13 December 2008. Dr. S. Kathirolu, Director, NIOT, felicitated the function. Prizes were awarded to the winners of the competitions conducted by WIE. Mrs. Ramalatha Marimuthu, IEEE R10 WIE Coordinator, summarized the WIE activities. A presentation followed on the WIE Sangamam Project.

The Broadcast Engineering Society (India), Chennai Chapter, and IEEE Madras Section jointly celebrated the National Public Service Broadcasting Day on Saturday, 15 November, 2008 at Multi Tract Studio Auditorium, All India Radio, Chennai. Mr. Chandra Dathan, Director, Satish Dhavan Space Centre, ISRO, Sriharikota, was the Chief Guest and Dr. K. Giridhan, Professor, Department of Electrical Engineering, IIT Madras, Chennai, was the Guest of Honour.

The IEEE Computer Society organized two talks in the area of Open Source at a meeting on December 17, 2008. The topics covered are: Open Source: myths, facts and opportunities by Mr. Jordi Mas, Director of Community Development, Openbravo (Open ERP Company) and Open Source Community Development by Mr. Tim Cloonan, Director, Open Source Community Marketing, JasperSoft.

The IEEE Oceanic Engineering Society, India Chapter, IEEE Technology Management Council, Madras Chapter and IEEE Power Energy Society, Madras Chapter, jointly organized a Guest Lecture on "Developments at the University of Tokyo in the field of Underwater Vehicles" by Mr. P.V. Unnikrishnan, URA Laboratory, Underwater Technology Research Center, Institute of Industrial Science, University of Tokyo, Japan, on 20 December, 2008.

IEEE Computer Society, Madras Chapter, IEEE Technology Management Council, Madras Chapter, IEEE Power Engineering Society, Madras Chapter, and Computer Society of India, Chennai Chapter, will exhibit a presentation on e-procurement & Material Management in Railways by Mr. B. Srinivasan, Sr. EDP Manager, Southern Railway, Chennai, on 27 December, 2008.

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## From The Editor's Desk

**H.R. Mohan**  
hrmohan@gmail.com

Dear Friends,

LINK Congratulates Prof. Ashok Jhunjhunwala, Dept. of Electrical Engg, IIT, Madras and a member of IEEE Madras Section for being elevated as a Fellow of IEEE.



LINK also congratulates Ms. A. Mary Jescintha of B.S. Abdur Rahman Crescent Engineering College & Mr. R. Nitin Balajee of Sri Venkateswara

College of Engineering, the winners of Info Contest 0811 who will receive a prize of Rs. 500/= each sponsored by SRA Systems.

The Nov 2008 technical meeting on "Trends in Computer Architecture" organized by the IEEE Madras Section and IEEE CS along with CSI Chennai Chapter was well attended. The time was insufficient to cover all the aspects of the topic. It was felt that a tutorial for four hours could be organized for the benefit of both student and faculty members as the topic is of great importance in the current IT scenario.

We were constrained to state that we are not getting inputs from the student branches on the events being organized except a lone event - Student Professional Awareness Venture (SPAve' 08) held at Kongu Engineering College.

WIE has been active. The event to distribute the prizes to the winners of the Robotics contest was well organized. The recently opened OES chapter is quite vibrant with two events in this month itself of which one has been covered. The other societies such as Computer, Technology Management Council, Power Engineering are also active and have organized more than one event. A report on the national convention on Knowledge, Library and Information Networking supported by IEEE CS is published in this issue.

This issue features two articles - "Security Enhancement of Mobile Networks Using JINI Technology" by Ms. Selva Amal Arasi of KLNCE, a philosophical article on "The Powers of Optimism" by Mr. Prithvin Rajendran of SSNCE. We trust the items published under "Infobits & Resources", "Social Networking" and "Project Control" are of interest to our readers.

Dr. P. Suresh Chander Pal, Chair, Student Activity, IEEE Madras Section & IEEE India Council, in his article, has stressed the need to join IEEE & energeise the future.

Attention of readers is invited to the announcement relating IEEE Presidents' Change the World Competition and to the list of forthcoming events - workshops, conferences being organized or supported by IEEE and its sister societies.

LINK wishes all its readers A HAPPY AND PROSPEROUS NEW YEAR 2009.

### Editorial Team

Mr. H.R. Mohan, Dr. S. Salivahanan, Dr. M. Ponnaivaikko,  
Dr. P. Suresh Chander Pal, Mr. T.S. Rangarajan, Mrs. M. Ramalatha

## Technical Meeting on Trends in Computer Architectures

A technical meeting on the topic “Trends in Computer Architectures” by Prof. B. Govindarajulu, Dean (CSE & IT), Rajalakshmi Engineering College, Chennai & Author of the books “IBM PC and Clones: Hardware Trouble Shooting and Maintenance” & “Computer Architecture & Organization” was organized jointly by the IEEE Madras Section, IEEE CS, Madras Chapter, and CSI Chennai Chapter on 15<sup>th</sup> Nov. 2008.



Dr. S. Salivahanan, Chairman, IEEE Madras Section welcomed the gathering. Mr. P. Kumar, Treasurer of Computer Society of India, Madras Chapter and Prof., IT Dept, RCE introduced the speaker.

The speaker, Prof. B. Govindarajulu, started his presentation with terms related to computer architecture, then briefed on the old & modern processors, computer classifications &

generations. The concepts & techniques & modern computer architecture were then introduced. He explained how a programmer views the architecture and the dependency of the architecture by other engineering fields. He also outlined the five major dimensions in the goal for computer architecture, namely - cost, performance, maintenance, capacity & convenience of usage.

Prof. B. Govindarajulu, then explained about the multiprocessor and gave examples of various types of processors such as scalar, super scalar, vector, pipelined, array processors, CISC & RISC. Instruction cycles & memory organization including cache & virtual memory were discussed.

In his talk, the pipelining concepts were detailed out with examples. The CISC issues and the RISC solutions were also highlighted.

The architectures of popular Pentium & Pentium Pro processors were discussed along with the techniques of software pipelining & parallelism.

The evolution of usage – uniprogramming, multiprocessing, parallel processing, multi-tasking & computer networking principles were touched upon. Concepts of threading & multithreading, fine & course grained multithreading, simultaneous multithreading were briefly discussed by Prof. B. Govindarajulu.

He also spoke on the features of tightly coupled & loosely coupled multiprocessor systems and discussed on clustering for load balancing & fault tolerance, disk mirroring & duplexing principles, server duplication & clustering concepts.

After the talk, Mr. H.R. Mohan, Chairman, IEEE Computer Society, Madras Chapter presented a memento to the speaker Prof. Govindarajulu. Mr.Kumar, CSI Chennai Chapter proposed the vote of thanks. ■

## Join IEEE & Energise the future



*Dr. P. Suresh Chander Pal, Chair, Student Activity, IEEE Madras Section & IEEE India Council.*

Greetings and hearty welcome to all Members and Student Members as we step into New Year 2009! Are you making a positive impact on the world? You should help celebrate 125 years of engineering the future. Also be sure to visit the IEEE 125<sup>th</sup> Anniversary Website for information on how to celebrate IEEE’s 125<sup>th</sup> Anniversary.

As you are aware, a Student Branch is a basic operating organizational unit of IEEE, to nurture and encourage students to stay up to date in technical field, through

Conferences, Seminars, Workshops, Tutorials & Meetings, facilitate online personal access and networking with communities worldwide with common interests to share ideas, methods, problem solutions and fulfill the mission of IEEE for promoting global prosperity.

An active & dynamic IEEE Student Branch can be one of the most positive elements beneficial to the Society and students can shape the world free of disasters, terrorism, economic downturn etc and energise the future!

We belong to the IEEE Asia-Pacific Region (Region 10), which has diverse cultures & traditions and which is very special.

- (1) in having the highest percentage in student members,
- (2) the highest percentage of female members and
- (3) the highest membership of all the Regions.

In Madras Section, we enjoy the privileged position of having the highest number of Student Branches, in the world! The number of SBs has increased from 86 to 129 & the student membership from 3683 to 4776 in the past few years! Our total Membership in the Section is 6307 as of end of November 2008 & the student-membership is about 76% of the total membership.

The student membership did not decline in our Section despite the annual membership fee of \$25, which is considered high in India. This is a reflection of the value provided by IEEE membership!

IEEE offers Rebates & Allotments to help SBs with operating costs, based on their timely submission of their Annual Report & Annual Plan. Each SB is granted \$100 for the startup! Sending in application forms for the numerous IEEE Awards for Students and for the SB Councillors when they excel in performance and also organizing Students Professional Awareness Conference & Students Professional Awareness Ventures also get them fabulous Cash Awards, Certificates and Recognitions! In IEEE,

students, volunteer to do many wonderful things that benefit the Society and the humanity. They gain rich experience!

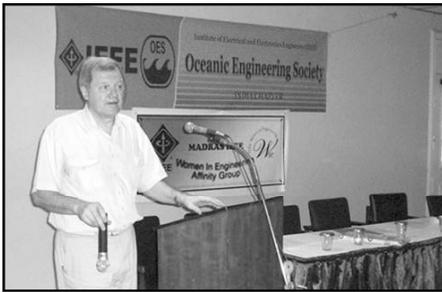
Through SB activities, the students learn about professional development skills & develop contacts with Section members and industrialists/corporate bodies and personally grow with active participation! The professional, technical & social activities that a SB can offer transcend the boundaries of the faculties or departments. I make appeal to students to participate in the M. V. Chauhan Students Paper Contest 2008 (last date: 26<sup>th</sup> Dec. '08).

We have a tough challenge to retain current members and recruit new members as our concerns regarding the dormant SBs are deep. To help us in this effort, a new initiative Region10 GINI (Globally Integrated Network of IEEE) has been launched in IEEE Madras Section on the model taken from Kerala Section LINK project, by creating 10 Hubs to cover all the 129 SBs, in our Section. Kindly visit IEEE Website to join and to know about membership benefits.

I make an ardent appeal to all the Students in Engineering Colleges to join IEEE, immediately as member, if they have not joined already and actively participate in the GINI and avail the full benefits of IEEE membership

I invite your suggestions and volunteer efforts to add new dimensions for the success of our endeavors to scale to new heights and to help celebrate 125<sup>th</sup> Anniversary of IEEE in a fitting manner! ■

## Madras IEEE Women in Engineering: Prize Distribution for Project Contest on “Society Useful Robots”



Madras IEEE Women in Engineering Affinity Group organized the prize Distribution function for the Student Project Contest on “Society Useful Robots” on 13<sup>th</sup> Dec 2008 at Hotel Pangrove, Chennai. It was supported by IEEE Madras Section, Oceanic Engineering Society, India Chapter and IEEE MADRAS GOLD. The Competition call was made in early July for the IEEE student members of Tamil Nadu and 29 papers were received for the contest from 22 different colleges across the state. The scrutinizing committee had a tough time filtering out the papers since the papers were of good standard and dealt with innovative ideas. Finally after two levels of filtering, a panel of judges evaluated the entries on the basis of concept, creativity, technical content and presentation. The following three papers were selected and announced as prize winners.

1. “A Rescue Robot Control Architecture ensuring Safe Semi-Autonomous Operation” by S. Rekhah, A. Akalya, Erode Sengunthar Engineering College, Erode.
2. “S.O.S - Sense of sight – The audible optics” by Mr. N. S. Bharath Kumar and Ms. S. Akshaya, Meenakshi Sundararajan Engineering College, Chennai.
3. “Safe Drive” by M. Ramya and V. Nagavignesh of Coimbatore Institute of Engineering and Technology, Coimbatore.

The lunch was a buffet which was really an ice breaking session for the members from different organizations. The registration started at 1.00 p.m. and about 80 student members and members registered. There was a variety of participation – students of Easwari Engineering College, St. Joseph Engineering College, St. Xavier’s Catholic College of Engineering, Coimbatore Institute of Engineering and Technology, Meenakshi Sundararajan Engineering College, Erode Sengunthar Engineering College, Sri Muthukumaran Institute of Technology, members from

organizations like National Institute of Ocean Technology, Signals and Systems Pvt. Ltd, and other academic organizations across the state.

The function started with invocation by S. Preethi of St. Joseph College of Engineering Mrs. D. Vydeki, Treasurer, Madras IEEE WIE welcomed the gathering. Following her, Mrs. Ramalatha Marimuthu, Asia Pacific WIE Coordinator gave a brief account of Madras WIE activities. She elaborated on the Student Project Contest, how the topic was chosen and how it has helped improved the technical as well as social awareness for the Engineering students in Tamil Nadu. Dr. S. Kathirolu, Director, National Institute of Ocean Technology felicitated the function. The Chief Guest Dr. Sergey Sukonkin, Department of underwater Vehicles, Russian Academy of Sciences, Russia was introduced by Dr. Atmanand, Chair, IEEE Oceanic Engineering Society, India Chapter.

The Chief Guest Dr. Sergey Sukonkin, gave an inspiring talk on “Advances in Underwater Vehicles”. With his vast technical knowledge and experience, he captivated the members through videos and pictures. He explained about the tsunami tracking system and earthquake tracking system, the evolution of underwater vehicles for the shallow seas and the deepest trenches and shared his experiences in their design and development.

The Chief Guest presented the prizes and certificates to the first three prize winners.



Dr. Suresh Chander Pal, Student Activity Chair, and Dr. Michael N. Kumar, Executive Committee Member, IEEE Madras Section distributed the certificates to the participants.

The prize winners gave brief presentations on their project. A presentation on Sangamam Project was followed. Sangamam is a project launched by Madras IEEE WIE for involving the student community in technology transfer to rural areas. This has been successfully going on in different districts of Tamil Nadu through different student branches. St. Xavier’s Catholic College of Engineering, Chunkankadai, Kanyakumari District had come over to give a presentation on the programmes that are to be organized under the Sangamam Project. Career Guidance Programs for the rural school children, rural youth development program and a WIE awareness program are planned under this project.

Vote of thanks was proposed by Dr. T. Thiagarajan, Secretary, IEEE Madras Section and the function ended with national anthem.

### Faculty Development Programmes

Karunya University, Coimbatore will be organizing three/four Faculty Development Programmes during the period Jan-Jun 2009.

Some of the topics include: Computational Fluid Dynamics; Intelligent Software Agents for Knowledge Engineering; FPGA Based System Design using EDA Tools; Research issues in information Security.

Please look forward to detailed announcements shortly.

### Chairman’s message continued

Those who have not yet renewed their memberships of IEEE can renew them at the earliest.

As the Chairman of IEEE Madras Section, let me take this opportunity, to remind you dear friends and students, that your potential exists at a lower level of consciousness. The only way to reprogram your mind for success is to change what has been entered into your memory files using autogenic conditioning, a self-generated conditioning. This is a proven method of success. It involves a three-dimensional technique that combines (1) progressive relaxation (2) positive affirmations and (3) creative visualization. This allows you to tap into your full potential, all of which exists at a lower level of conscientious. So wake up! Be Conscious! You can conquer your world! All the best! Thank you.

Dr. S. Salivahanan

## NACLIN 2008: National Convention on Knowledge, Library and Information Networking

The Eleventh National Convention on Knowledge, Library and Information Networking NACLIN 2008 was organized by DELNET-Developing Library Network and Karunya University, Coimbatore from November 4-7, 2008 on the theme "Digital Futures: strategies for developing world class libraries".

The convention, NACLIN 2008, was supported by IEEE Computer Society, Madras Chapter along with Div II on Software of Computer Society of India (CSI), Raja Rammohun Roy Library Foundation, Ministry of Culture, Govt of India; Ministry of Information Technology and DRDO Ministry of Defence. It was sponsored by Pressmart as Platinum sponsor and Emerald Group Publishing Ltd as Silver Sponsor.

The inaugural function started with a welcome address by Dr B C Pillai, Dean Research, Karunya University and was followed by introductory remarks by Dr H K Kaul, Director, DELNET who emphasized upon the need to deliver knowledge at the grass-root level in the country. Dr Paul P Appasamy, Hon'ble Vice-Chancellor, Karunya University then released the pre-conference proceedings of NACLIN 2008 containing 23 papers and the NACLIN 2008 Souvenir and delivered the inaugural address. According to Dr Appasamy, the information overload is of major concern to the researchers and scholars. He said that the networking of libraries and information sharing has become the order of the day. The copyright and IPR issues are the major issues and plagiarism and piracy is of serious concern. Talking about the future of libraries, he said that the infrastructure for digital libraries should be developed and there is a need for devising strategies for developing world class libraries. Dr Anne Mary Fernandez, Registrar, Karunya University extended facilitations to the organizers and delegates.

The inaugural function was followed by a on "Web 2.0: Tools and Technologies". The first session was taken by Prof. Dr V Saravanan, HOD, Dept of Computer Applications, Karunya University along with a product demonstration by Mr Prakash Kamdar, Director of Digisys Technologies Pvt Ltd, Ahmedabad. After lunch, the tutorial on Web 2.0 was continued by Dr M Tamizchelvan, Librarian, Sri Krishna College of Engineering and



*Inaugural address by Dr Paul P Appasamy, Hon'ble VC, Karunya University*

Technology, Coimbatore who appraised the delegates about the various Web 2.0 tools like Blogs, RSS, Wikis, etc.

The second day of the Convention started with a tutorial on Koha : Open Source Library Integrated System conducted by Sangeeta Kaul, Network Manager, DELNET and followed by a product demonstration by Mr Varun, Cambridge online journals and Mr Bharat Nagrecha of Beeges Computers, Mumbai.

The third and fourth day of the conference had six technical sessions on the following themes: User studies and digital resources; Resource sharing and library networking; Library Management; Information Society and Libraries; Content Management;

Web technologies. Keynote addresses by eminent professionals like Mr. E. Rama Reddy, Retd. Librarian, Univ. of Hyderabad, Prof. Manorama Srinath, Retd. Professor and Head, Dept of Library and Information Science, University of Madras, Dr Harish Chandra, Librarian, IIT Madras and Dr M G Sreekumar, Librarian, IIM Kozhikode and papers by researchers and working & practicing librarians were presented in each of these sessions. There was a product demonstration by Ebsco. A Panel discussion on the conference theme "Digital Futures: strategies for developing world class libraries" was also held.

NACLIN 2008 concluded with the valedictory function in which Ms Sangeeta Kaul, Network Manager, DELNET presented the Rapporteur-General's Report of NACLIN 2008. Dr P C Pillai, Dean Research, delivered the concluding remarks. It was followed by the Presidential address by Dr H K Kaul, Director, DELNET. Dr J Dominic, Organising Secretary, NACLIN 2008 placed the vote of thanks.

The Conference was attended by over 125 delegates from various parts of the country including the states of Andhra Pradesh, Delhi, Gujarat, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Manipur, Puducherry, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. ■

## Forthcoming Events

**TIMA: 6<sup>th</sup> International Conference on Trends in Industrial Measurements and Automation;** Theme: Intelligent sensing and control (towards energy management and environmental preservation); 4 – 6, Jan 2009, Chennai, India; Organised by: Dept. of Instrumentation Engg., MIT Campus, Anna University, Chennai; For further details pl. contact: Dr. T. Thyagarajan, email: [tima\\_2009@rediffmail.com](mailto:tima_2009@rediffmail.com)

**ICETiC 2009: International conference on Emerging Trends in Computing;** 8-10, Jan 2009, Virudhunagar, Tamil Nadu; Organized by: Dept. of CSE, Kamaraj College of Engineering & Technology; Supported by: IEEE Madras Section, IEEE Computer Society - Madras Chapter, Computer Society of India - Div II (Software).

For Further details, pl. contact: Er. N. Saravana Selvam, email: [icetic2009@gmail.com](mailto:icetic2009@gmail.com), Website: [www.icetic2009.org/](http://www.icetic2009.org/)

**ICWIS-09: International Conference on Web Intelligent Systems;** 8 – 10 January 2009, Chennai, India; Organized by: Rajalakshmi Engineering College, Chennai; In Association with: IEEE Computer Society - Madras Chapter, Computer Society of India - Div II (Software) & Chennai Chapter, Indian Institute of Information Technology and Management – Kerala. For further details, pl. contact: Website: <http://www.rajalakshmi.org/icwis09>, email: [icwis09@rajalakshmi.org](mailto:icwis09@rajalakshmi.org)

**NCCSE 2009: National Conference on Computational Science And Engineering;** 6 – 7 Feb, 2009 at Kochi. Organized by: School of Computer Science, Rajagiri College of Social Sciences, Cochin in association with Computer Society of India (CSI) Div II on Software and CSI Cochin Chapter. Send the papers by 15<sup>th</sup>

Dec 2008 to Mr. Madhu S. Nair at the email: [madhu\\_s\\_nair2001@yahoo.com](mailto:madhu_s_nair2001@yahoo.com) / [madhu.rajagiri@gmail.com](mailto:madhu.rajagiri@gmail.com). For details visit the website at visit [www.rajagiri.edu](http://www.rajagiri.edu)

**NCISE: National Conference on Information and Software Engineering;** 13-14, Feb 2009 at Chennai. Organized by Dept. of Information Technology and IEEE CS Student Branch Chapter, Aarupadai Veedu Institute of Technology, Chennai in association with IEEE Madras Section, IEEE Computer Society, Madras Section & CSI Division-II on Software. Last date for Paper submission: 31<sup>st</sup> Dec, 2008. For details, pl. contact: Dr.A.Anthony Irudhayaraj, Convener, NCISE, Email: [ncise2009@gmail.com](mailto:ncise2009@gmail.com), Cell phone: 09443884732, 09444812756.

**IEECONs-2009: National Conference on Innovations in Electrical, Electronics and Control Systems:** March 20 - 21, 2009 at Kumaraguru College of Technology, Coimbatore. For details contact: Convener Prof. K. Regupathy Subramanian, Dean R&D/EEE. Email: [ieecons09@yahoo.co.in](mailto:ieecons09@yahoo.co.in)

**M.V. Chauhan Student Paper Contest**

The last date for the submission of the papers for the contest has been extended till 26<sup>th</sup> Dec 2008

**IEEE Presidents' Change the World Competition**

IEEE is hosting a global competition for students, who develop unique solutions to real world problems, using Engineering, Science, Computing and Leadership Skills to benefit their community or Humanity. Winners could walk away with up to \$10,000 and a trip to the 2009 IEEE Honors Ceremony in Los Angeles, California, USA. The Competition runs from 1 September 2008 to 28<sup>th</sup> February 2009. For more details, read the competition flyer by visiting the IEEE 125<sup>th</sup> Anniversary Website.

**Student Professional Awareness Venture '08 (SPAVe'08) at Kongu Engineering College**

The Student Branch of IEEE at Kongu Engineering College had conducted the Student Professional Awareness Venture (SPAVe'08) programme on 27th Sep 2008. Prof. K. Narayanan, HOD, EIE welcomed the gathering. The presidential address was given by Prof. S. Kuppuswami, Principal. Ms.Nivedita, Joint Secretary introduced the chief guest Mr. C. Robinson, chief security analyst of [www.ethicaluniversity.com](http://www.ethicaluniversity.com) who gave a guest lecture on Google analytics.



Mr. Robinson, began with a brief description of the basic terminologies used extensively throughout most of Google's products with special emphasis on site usage statistics. Site usage provides details such as the number of visitors that visit the website over a month or a week. He, then explained the associated statistics like whether the same visitor visits the site again, the duration of the visits and tracing new users and their details etc. He then delved deeper into underlying Google technologies like Google Gears — that help in speeding up websites and helping the end user, Project hosting solutions and developers which could be accessed through [code.google.com](http://code.google.com), API's help in getting existing projects, modifying them and republishing them.

The next section of Mr. Robinson's talk was a brief lecture on how to make money online, and increasingly popular alternative to [work@company](mailto:work@company) trends. He went on to say that most people already have the necessary skills to effectively make money online, the basic needs being a few web programming technologies

like HTML and PHP, designing skills with Photoshop and above all good communication and literary skills.

Mr. Robinson said that Google services are based around Google's search engine which optimizes search results using a largely artificial intelligence based system. Supported file types and formats were shown and interesting new method of obtaining CCTV footage wherein IP addresses were used to locate different cameras and their details. More on the technical side, Mr. Robinson explained the life cycle of a google query – web server to index server query processing, the query travels to the document server for snippet generation and obtaining the search result.

After giving a brief introduction about Google Suggest, which provides more refined search results and is best suited for novel and article searches, he moved on to the world of Google AdSense. The overview page of AdSense gives us what we have got as payment so far in dollars through AdSense. A typical AdSense page consists of: AdSense content, AdSense for

search, account status, references and a view tab (to view detailed transaction reports). Visitors form the basis for making money using AdSense and visitors were usually attracted to content that was original and not copyrighted. Google accounts automatically suspend any duplicate pages. Using Google Adwords, we can create our own advertisements and display it on the entire internet for public viewing. It also keeps track of visitors.

Mr. Robinson warned the audience about the threat of spammers and emphasized the importance of watching our steps online. Domain stealers and sellers are common. So verifying the domain ownership was of utmost importance. E-payments and conversions could be made safely and securely using [paypal.com](http://paypal.com) online banking services. Using this service, we can send and receive funds, transfer to local bank accounts, and use a variety of supported currencies.

In the afternoon paper presentation session, 13 papers were presented. Two best papers were selected for awards. A technical quiz comprising of three suspense-filled rounds was followed. After tough competition, one team out of five was selected. The Quiz was followed by technical dumb charades in which 5 teams participated. After three rounds, the top two teams were selected for prizes. A C-debugging competition was also held in parallel in which 12 shortlisted participants contested strongly for awards. The function ended with a brief prize presentation session, followed by the prize distribution.

Report by: Ms. Purnima Jothikrishnan, Secretary, IEEE Student Branch. [ieeekc@gmail.com](mailto:ieeekc@gmail.com) OR [jpurni@gmail.com](mailto:jpurni@gmail.com)



## IEEE MAS LINK SRA Systems

### Info Contest

**H.R. Mohan**

Chairman, IEEE CS, Madras Chapter  
Editor, IEEE MAS LINK  
AVP (Systems), The Hindu, Chennai

This is the eighth contest under Info Contest – an ICT quiz, a regular column in our newsletter LINK. The members are encouraged to participate in the contest and win a prize. Answers to the contest questions can ONLY be sent by email following the guidelines provided at the end of the questions. TWO lucky winners who answer to maximum no. of questions and early (selected by lot if multiple entries qualify) will receive an award of Rs. 500/= each, sponsored by SRA Systems.

#### Info Contest – 0812

This contest has four sections A, B, C & D having five questions each. The number in bracket at the end of the questions denotes the no. of characters in the answer string.

#### A. Identify the terms which are defined below.

- A1. Describes a condition in which there are only two states.
- A2. The term used to describe the interconnected world or community of bloggers.
- A3. Intermediate storage area, often used to compensate for the different speeds at which hardware units can handle data
- A4. A common synonym for an integrated circuit, usually the one used for the main processor.
- A5. Program which converts high-level source language instructions into executable machine code.

#### B. Identify the company / product / magazine / service from the Tag Line.

- B1. Keeping You Ahead
- B2. Making it possible
- B3. Consider IT Done
- B4. Making Innovation Thrive
- B5. The Business of Communications

#### C. Provide the Answer.

- C1. Who is considered as the “Father of the Indian outsourcing industry”?
- C2. Which Telco has recently launched India’s first third generation (3G) mobile services?
- C3. Which IT personality has written the book “Imagining India: Ideas for the new century”
- C4. The McColo network in US was notorious for what?
- C5. BPIAI is the association of \_\_\_\_\_

#### D. Fill in the blanks / Provide the answer.

- D1 Intel: Xeon = AMD: \_\_\_\_\_
- D2. Google: Google Earth = ISRO: \_\_\_\_\_
- D3. Adobe : Flash = Microsoft : \_\_\_\_\_
- D4. 404 : Not Found = 302: \_\_\_\_\_
- D5. Screen of Death : MS Windows OS = Green Screen of Death : \_\_\_\_\_

#### Guidelines to submit the answers to the Info Contest by email.

In the Subject,

- Write the Contest No. (Info Contest – 0812) in the subject line.

In the body of the mail,

- In the first line, write the contest No: Info Contest – 0812
- In the second line, write your membership no.
- In the third line, write your email id.
- In the fourth line, write your name.
- In the fifth line, write the answers to the five questions of Section A, separated by comma.
- In the sixth line, write the answers to the five questions of Section B, separated by comma.
- In the seventh line, write the answers to the five questions of Section C, separated by comma.
- In the eighth line, write the answers to the five questions of Section D, separated by comma.

As the evaluation of the entries is automated, pl. ensure the above guidelines are followed.

Email the answers to:

[hrmohan.infocontest@gmail.com](mailto:hrmohan.infocontest@gmail.com)

The last date to receive the answers by email is 5<sup>th</sup> Jan 2009.

**Info Contest – 0811**

**Answers & Winners**

#### Answers:

Argument, Assembler, Analog, Algorithm, Address  
MROTEK, Silicon Power, Imation, Renesas,CHIP  
Blue Waters, O’Reilly Media, True, Hindawi, Elisha Gray  
fisking, Apple, Isaac Asimov, Turing Award, My spoon

#### Winners:



**Ms. Mary Jescintha. A**  
B.S. Abdur Rahman Crescent  
Engineering College  
Mem No : 90353373  
Email id : majes26@gmail.com



**Mr. R. Nitin Balajee**  
Sri Venkateswara College of  
Engineering  
Mem No. 90234625  
Email: rnb24688@gmail.com

Both the above will be awarded a prize of Rs. 500/= each. LINK acknowledges with thanks the sponsorship of the awards by SRA Systems ([www.srasystems.com](http://www.srasystems.com)). ■

#### Section Membership as on 15th December 2008

Life Senior	-	8
Life Fellow	-	1
Life Member	-	3
Senior Member	-	74
Member	-	1312
Affiliate	-	29
Associate	-	117
Graduate Student Member	-	569
Student Member	-	4292
<b>Total</b>	-	<b>6,405</b>

# Security Enhancement of Mobile Networks Using JINI Technology



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## 1.0 INTRODUCTION

A network is a group of interconnected systems that share services, data and interact through a communications link. There are four things that must be present in a network: 1) two or more individual systems 2) something to share (ex: data) 3) a transmission medium 4) rules of communication or protocols. The existing model of the communication in a network consists of seven layers. It is called as the OSI (Open System Interconnection) model. 1) Physical 2) Data link 3) Network 4) Transport 5) Session 6) Presentation 7) Application. Ad hoc networks are a new wireless networking paradigm for mobile hosts. Unlike traditional mobile wireless networks, ad hoc networks do not rely on any fixed infrastructure, instead, hosts rely on each other to keep the network connected. One main challenge in the design of these networks is their vulnerability to security attacks. To overcome the security threats in the networks we use JINI technology which is a runtime infrastructure to add, remove, locate, and access network services.

## 2.0 LITERATURE SURVEY

**2.1 REMOTE PDA PRINTING:** It involves personal digital assistants to retrieve data from an office and takes printout of it at a business centre. It was done by SUN MICROSYSTEMS in 2000. Here, PDA (Personal Digital Assistant) uses discovery and join to find lookup service, and then it obtains RMI (Remote Method Invocation) Interface to service. PDA locates lookup services at office through Internet and finds printing service. Lookup returns proxy to printing service. PDA displays GUI (Graphic User Interface) for selection from proxy service. PDA finds proxy from Storage service. PDA user configures the printer through proxy service. Document is dragged and dropped from the storage to printer.

**2.2 ADTRANZ PROJECT:** An R&D project was done for the railway manufacturer *Adtranz*, and was experimented with JINI technology in order to evaluate it in an industrial application. Two potential application domains were identified. The first application domain concerns

the embedded devices on a train. They are interconnected with a train communication network. As the composition of a train changes over time, the communication network must configure itself automatically and when the train is powered up, it should reconfigure automatically when locomotives and cars are added to or removed from the train. The second application domain is the integration of the on-board systems of a vehicle fleet into the back office system of an operator and a manufacturer.

**2.3 MULTICAST REQUEST PROTOCOL:** JINI entities must be able to perform multicast discovery messaging when they have been started, for there is a possibility that after a major network restart, the network is flooded with messages. The discovering entity sets up a TCP server. Lookup servers run instances of the multicast request server, which listen for multicast requests from discovering entities. The discovering entity performs a multicast that requests references to the lookup services. The lookup server connects to the discovering entity's multicast response server, and uses a unicast discovery to provide a reference to itself. This was implemented by Johannes Lehto from the Department of Computer Science, University of Joensuu, 2001.

**2.4 ORBITZ:** It created an environment of about 800 servers, 90 software developers, 3.9 million lines of code in the web system with 110,000 being added or deleted every week, (most is in the application layer rather than the services layer) and it sent over 775,000 wireless messages in Dec 2003 using JINI technology.

**2.5 FORD:** Ford Research and PsiNaptic Inc. used JINI technology for Integration of factory-installed and after-market vehicle components and sensors because of complex interdependencies of components and increased demand for integration of consumer devices. It was done in 2004.

## 3.0 PROBLEM IDENTIFICATION

The commonly used network system is congested and not reliable. Moreover, it faces the problems of:

- Finding and connecting services on a network, much like the component problem in standard, single-address space, object-oriented programming
- Creating reliable sets of services out of unreliable parts, including an unreliable network

- Evolving parts of the service set without halting the service set itself at any time.

## 4.0 OBJECTIVE

The problem of reliability is considered and the security is enhanced using the JINI technology. Reasons for using JINI technology is that it is protocol-independent, the need to design to each layer is eliminated, creates applications and services that interact without preinstalled drivers and has self healing nature.

**4.1 REQUIREMENTS:** To be able to run a JINI service or client it requires some hardware. A device must implement the TCP/IP (Transmission Control Protocol over Internet Protocol) and UDP/IP (User Datagram Protocol over Internet Protocol), preferably with DHCP (Dynamic Host Configuration Protocol). The network also must support multicast. To be able to use a service a specific client or some kind of service browser must be used. Furthermore, both the client and the server must run Java with the Jini-extension installed. JINI Technology is built on the JAVA technology and uses its features like the Java Virtual machine, Virtual Object code, Downloadable code, Unified type system.

## 5.0 METHODOLOGY

There should be a way to restrict access to particular groups. Jini provides a way using Java 2 security mechanisms to limit what groups a service or application can join. When a service or an application tries to create a Lookup Discovery object, the code checks to see whether the creator has permission to try to discover each of the sets of the desired groups.

LookupDiscovery will raise a `java.lang.SecurityException` if the proper privileges are not in place. By default, applications are allowed to search no groups.

Permission need to be set for even trusted programs. Create a policy file and pass the file to JVM (Java Virtual Machine) via the `java.security.policy` property. Jini introduces its own permission class just for granting access to groups. This class is: `net.jini.discovery.DiscoveryPermission`.

The five major concepts in JINI Technology are:

- Discovery
- Look up

- Leasing
- Remote events
- Transactions

**Discovery**

Finds a service that matches the requirements. The methods used are: LookupDiscovery disco = new Look up Discovery (groups); (instantiation) disco.add Discovery Listener (disc Listener); (Registration) void discarded (Discovery Event e); (Calling methods) void discovered (Discovery Event e);

**Look up**

It searches for the desired services.

The methods used are:

ServiceRegistrationregister(ServiceItem item, long lease Duration);(for registration)

Publicjava.lang. Object lookup(Service Template tmpl) throwsjava.rmi. Remote Exception (for finding the service)

**Leasing**

Track active JINI services that live for a period of time.

The method used is getLease()

**Remote events**

They are used for asynchronous communication.

The method used is notify()

**Transactions**

Services notify interested services of changes in their status.

The method used is abort().

**6.0 PLAN OF ACTION**

S. No.	ACTIVITY	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08
1.	Literature survey	■	■						
2.	Hardware analysis			■	■				
3.	Software analysis								
4.	Checking feasibility of environment					■			
5.	Implementation and testing						■	■	
6.	Report generation								■

**7.0 CONCLUSION**

Thus the literature survey has been done and the objective and methodologies has been clearly defined.

**8.0 REFERENCES**

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- 2) Txomin Nieva et al, "Jini technology applied to railway systems", 2nd International Symposium on Distributed Objects and Applications, 2000.
- 3) Fredrik Andersson and Magnus Karlsson, "Secure JINI services in ad hoc networks", Master of Science Thesis Royal Institute of Technology (KTH), 2001.
- 4) M. -S. Alouini and A. 1. Goldsmith, "Adaptive modulation over Nakagami fading channels", vol. 13, May 2000.

**8.1 SITE REFERENCES**

- <http://www.jini.org/>
- <http://java.sun.com/technology/jini/>
- <http://www.javapassion.com/jini/>
- <http://www.seuf.de/>

**What is Project Control?**

Project control consists of the information systems and the management procedures that allow us to answer questions such as

- Are we on track?
- Are we on budget?
- Are we on schedule?
- Are we delivering what we said we would?
- Are we meeting quality and performance standards?
- Are we meeting stakeholder expectations?
- What have we accomplished?
- Will the project objectives be met?
- What deviations/variances exist?
- What corrective actions are we taking?
- What caused these variances?
- What risks are we monitoring?
- What issues do we need to resolve?
- What lessons have we learned?

Officially, PMI defines the controlling processes as those processes that ensure that project objectives are met by monitoring and measuring progress regularly to identify variances from plan so that corrective action can be taken, if necessary.

**Components of Project Control**

Project control generally involves the following eight key processes. Over and above, your leadership, communication, interpersonal, analytical, and team management skills are equally, if not more, important to project control. However, without these fundamental eight management processes in place, you will have a much more challenging time.

- **Performance Reporting** - The process for measuring and communicating project status to the targeted stakeholders. Information generally focused on the performance of critical success factors against baseline targets, key issues, corrective actions, and forecasted metrics.
- **Change Control Management** - The process for reviewing, approving, and coordinating any request to alter project scope schedule or budget.

- **Configuration Management** - The process for controlling changes, updates, and versions of project deliverables.
- **Issue Management** - The process for identifying, tracking, and resolving issues that could impact the project critical success factors.
- **Risk Management** - The process for identifying, monitoring, and responding to project risks.
- **Quality Management** - The process for ensuring that work processes and project deliverables meet quality expectations.
- **Procurement Management** - The controlling processes specifically used to manage any suppliers and vendors involved in the project.
- **Requirements Management** - The process to ensure all requirements are identified correctly, documented, and tracked throughout the project.

Source & Courtesy: <http://www.informit.com/articles/article.aspx?p=1271>

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[www.ewh.ieee.org/r10/madras](http://www.ewh.ieee.org/r10/madras)

## Infobits & Resources

**A ‘Frankenrobot’ With a Biological Brain** University of Reading scientists have developed Gordon, a robot controlled exclusively by living brain tissue using cultured rat neurons. The researchers say Gordon, is helping explore the boundary between natural and artificial intelligence. Full story at <http://afp.google.com/article/ALeqM5iwb17K0AiHiNNks7i1P-GS80Vg>

**Medicine on Verge of Software Revolution** The health care industry will soon be revolutionized by computerized clinical decision support tools capable of advising doctors and patients on diagnoses and treatments, predicts a new Datamonitor report at <http://stuff.co.nz/stuff/4651547a28.html>

**Commanding Your Browser** Mozilla Labs is about to introduce Ubiquity, a new JavaScript-based interface for its Firefox Web browser that will allow users to run a variety of complex tasks by typing instructions, in the form of sentences, into a box in the browser. More at <http://www.technologyreview.com/Infotech/21215/?a=f>

**MIT Developing Super-Realistic Image System** MIT Media Lab professor Ramesh Raskar has developed realistic pictures using “6-D” images that have a full three-dimensional (3D) appearance and respond to their environment and produce natural shadows and highlights. The process can be used to create images that change over time as the illumination changes, creating animated pictures that move as the sun changes positions. Read more about it at <http://web.mit.edu/newsoffice/2008/camera-0807.html>

**Helping the Deaf to ‘See Sound’** Goldsmiths, University of London researcher Mick Grierson has developed Lumisonic, software that enables the deaf to view a real-time representation of sound. Lumisonic is designed to respond to computer-generated noise or sound from a microphone, and translate the sound waves into circles that radiate on a display. More at <http://news.bbc.co.uk/2/hi/technology/7558017.stm>

**Pocket Wikipedia** Pocket Wikipedia, hand-checked selection from Wikipedia which is about the size of a fifteen volume encyclopedia (24,000 images and 14 million words). The selection was made by Schools Wikipedia. Pocket Wikipedia was created to work on PocketPC systems. After that was ported on

Windows and Linux systems. Because the large size of the database file all OS versions of Pocket Wikipedia are distributed in one zip archive. To download, pl. visit <http://downloads.zdnet.co.uk/0,1000000375,39384217s,00.htm?dl=1>

**Hotkeycontrol** Hotkeycontrol is the award winning solution to create keyboard shortcuts for routine tasks. These tasks include, but are not limited to opening files, ejecting cdrom drives, restarting the computer, typing frequently used text, controlling active windows, changing volume and recording macros. The list of configured hotkeys can be shown transparently using on screen display (OSD) which eliminates the need to remember the hotkeys contrary to conventional hotkey managers. Besides that, volume status and other information can also be shown directly on screen using OSD. In addition to normal combination hotkeys, you can use single keys such as function or number pad keys. Download it from <http://downloads.zdnet.co.uk/0,1000000375,39373018s,00.htm?dl=1>

**Docs2Manage and Docs2Web Suite** Docs2Manage and Docs2Web Suite allows you to scan, import, extract keywords (OCR), search, view, e-mail, create PDF documents, print, and ultimately manage any type of document into an easy-to-use Windows Explorer like interface. Docs2Manage and Docs2Web Suite includes a database to get you started, but offers a wide range of database compatibility including MS Access, MS SQL Server, MySQL, Oracle, Sybase, etc. Make your documents portable with the ability to create CD-ROM archives and run Docs2Manage directly without any install process from these CD-ROMs freely on any Windows system. Docs2Web allows you to share your documents throughout your organizational network or to the Internet via a standard browser while respecting the user security you set in Docs2Manage and Docs2Web Suite. Whether you have hundreds of documents or millions, Docs2Manage and Docs2Web Suite is a powerful document management solution within your reach. To download, pl. visit <http://downloads.zdnet.co.uk/0,1000000375,39369421s,00.htm?dl=1>

**Social Networking for Business - Special Report** Social Networking sites have taken the world by storm, but how can you be sure if they are they good or bad for your business? ZDNet.co.uk explores the

ramifications of companies embracing this technology, including information management, decision making and business processes, and gives you all the tools you need to research a potential investment in collaborative software. Read the report at <http://resources.zdnet.co.uk/articles/video/0,1000002009,39286816,00.htm>

**A guide to desktop management** Desktop (and notebook) PCs present a huge headache for IT managers: looking after hardware and software inventory, configuration, security, patching and software licences, for example, can make serious inroads into the IT budget. This guide at <http://reviews.zdnet.co.uk/hardware/components/0,1000001694,39287671,00.htm> examines the technologies and tools that can make the job easier.

**Video program on “Careers in Information Technology”**

This program of about 21 minutes duration provides an overview of career possibilities in IT. IT professionals and engineers from large and small companies discuss the nature of their work.

View it at [http://www.ieee.org/portal/site/ieeetv/menuitem.6ce799f946c20d660374ca695bac26c8/index.jsp?&pName=ieeetv.viewer&path=/membport/ieeetv&file=Sloan\\_IT.xml&vid=46742&play=true](http://www.ieee.org/portal/site/ieeetv/menuitem.6ce799f946c20d660374ca695bac26c8/index.jsp?&pName=ieeetv.viewer&path=/membport/ieeetv&file=Sloan_IT.xml&vid=46742&play=true) ■

### The 10 IT Skills in Most Demand

According to CIO Insight magazine, based on the survey conducted among CIOs, the 10 IT Skills in Most Demand are listed below.

- Network Administration
- Windows Administration
- Desktop Support
- Database Management
- Wireless Network Management
- Telecommunications Support
- Web Development/Design
- Business Intelligence
- Virtualization
- .Net Development
- CRM Implementation

To see the related slide show, pl. visit <http://www.cioinsight.com/c/a/Careers/IT-Skills-in-Demand/>

# The Powers of Optimism

**Prithvin Rajendran**

IV Year

IEEE Student Branch Chair  
SSN College of Engineering

Can any individual learn optimism? Yes, according to renowned psychologist Dr. Martin Seligman, you can ... and if you believe the research, you probably should!

Let us consider a classic comparison of opinions between an optimist and a pessimist, the difference will be clear. Both of them observe a glass filled up half with water. The pessimist says, *The glass is half empty*. The optimist says, *The glass is half full*.

According to Dr Martin Seligman, *Psychology is much larger than curing mental illness or curing diseases. It's about bringing out the best in people; it's about positive institutions; it's about strength of character.*

Let us understand the rules of optimism. Never flock with the failures, always go with the winners. Avoid black and white statements. You must believe in what you do and in what you want to achieve. You must believe that you can succeed and you will. You must believe in the statement, *Failure is the first stepping stone to success.*

Great Britain faced obstacles on all fronts during the Second World War. Britain's Prime Minister Sir Winston Churchill said, *A pessimist sees the difficulty in every opportunity, an optimist sees the opportunity in every difficulty.* With continued optimism and sheer will power, Great Britain managed to wade against all troubles and came out victorious.

Individuals always interpret things in the positive or negative way. It has been identified that there are three primary elements of our explanatory style: permanence, pervasiveness and personalization. A quick overview of the three P's:

**Permanence:** Permanence is pretty straightforward. Something happens. Do you explain the results as permanent and likely to recur? If it's a bad thing, the optimist tends to think it is a fluke. If it's a good thing, they tend to think it permanent.

The opposite holds true for the pessimist: Good things are the flukes and bad things are more likely to recur.

**Pervasiveness:** Pervasiveness looks at whether we believe an event is specific or universal. With a good event, the optimist is more likely to extend it to her whole life. With a bad event, the optimist will tend to isolate the incident as specific to that situation. The opposite holds true for the pessimist. If something good happens, they think that it was a fluke. If something bad happens, they think it is a representative of their whole life.

**Personalization:** Personalization looks at whether we believe that we are responsible for the event, or if something outside of our control was responsible. The fancy psychological term for it is *locus of control*, whether you believe the control was internal or external.

There are many types of windows. There are French, rectangular, square, oval, triangular windows. The purpose of a window is to reveal what is going on in the outside world. A person who looks out through a window may see garbage, destroyed buildings, dead people and so on. On the other hand, a person may see gardens, meadows, rainbows and so on. How a person sees through a window determines his perspective of life. The person who sees the dirt of the world is a pessimist while the latter is an optimist. One should never look at things at rationally but must appreciate things for their beauty. Two prisoners looked out of their prison window. One saw mud while the other saw

stars. The former dreamt of nothing but the guillotine while the latter felt that there was hope in him being saved.

Robert Bruce was king of Scotland from 1306 to 1329. Robert Bruce waged wars with Edward I, king of England but each time he was defeated miserably. In 1305, Robert Bruce was lying in a hut, when his eye was caught by a spider - the creature was hanging by a long silvery thread from one of the wooden beams above his head, and trying to swing itself to another beam. The spider tried again and again, failing every time. Six times, counted Robert, the spider tried and failed. *Six times*, thought Robert to himself, *have I fought against the English and failed*. Robert thought, *Now if this spider fails again on the seventh attempt, I too shall give up the fight for Scotland. But if it succeeds, I shall try again*. The spider swung itself again and finally, on the seventh attempt, it succeeded. The perseverance of the spider inspired Robert Bruce to achieve victory.

I hope every individual gives up the way of negatively looking at things so that every individual starts behaving professionally and properly.

Conclusion: Is your glass half full or half empty? In either case, fill it all the way up with a healthy dose of optimism! ■

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## Social Networking is a Lot More Than MySpace and YouTube

*Just what is social networking? Ask three people, and you'll get three different answers. Although most people have a general idea of the basic concept, social networking means different things to different people depending on their background, interests, goals, and level of computer savvy. In this chapter, Patrice-Anne Rutledge describes width and diversity of social networking.*

MySpace ([www.myspace.com](http://www.myspace.com)) and YouTube ([www.youtube.com](http://www.youtube.com)) are two of the most popular sites on the web. For many people, these two sites satisfy all their social networking needs. But the world of social networking is much larger than its two highest profile sites. Business networkers could determine social networking isn't right for them after visiting MySpace and YouTube if they didn't also check out the many business-oriented sites that could offer them much greater benefits.

Just what is social networking? Ask three people, and you'll get three different answers.

In other words, the world of social networking is wide and diverse. Although early adopters of social networking skew to the young, the trend has now moved into the mainstream with sites for all ages, backgrounds, and interests. There's something for everyone, but you need to know where to find it.

A quick tour of the world of social networking gives you an idea of the vast differences between these sites as well as the possibilities for how social networking could benefit you. Some of the best-known and most-visited social networking sites include

- Bebo ([www.bebo.com](http://www.bebo.com))-Bebo reports more than 25 million members and is particularly popular in the UK. Bebo Bands and Bebo Authors draw musicians and writers looking to connect with their audience.
  - Ecademy ([www.ecademy.com](http://www.ecademy.com))-A business networking site with 150,000 members, Ecademy offers numerous networking groups based on your interests. It also offers in-person networking events, primarily in the UK.
  - Facebook ([www.facebook.com](http://www.facebook.com))- Starting as a community for Harvard students, Facebook opened its doors to anyone with an email address in September 2006 and increased its membership by 89 percent in less than a year.
  - Friendster ([www.friendster.com](http://www.friendster.com))-Friendster has a member base of 50 million users worldwide and is particularly popular in the Asia Pacific region.
  - hi5 ([www.hi5.com](http://www.hi5.com)) - With more than 60 million registered members and 25 million unique visitors per month, hi5 aims for an international audience with a localized interface available in multiple languages.
  - LinkedIn ([www.linkedin.com](http://www.linkedin.com)) - The largest and most popular of the business networking sites, LinkedIn offers profiles of more than 19 million professionals and is particularly popular with recruiters...and those who want to capture their attention.
  - MySpace ([www.myspace.com](http://www.myspace.com)) - Arguably the most popular social networking site on the web, MySpace is expanding from a youth-dominated demographic to encompass members of all ages. Although poor site design and numerous less-than-professional MySpace pages can be a detractor, MySpace is still a great networking tool for the right people (think musical artists, marketers aiming for a general audience, authors of mainstream novels, and so forth).
  - Orkut ([www.orkut.com](http://www.orkut.com)) - Google may have founded Orkut, but that hasn't translated into worldwide popularity. Its most significant user base is in Brazil and India, where it captures a high market share.
  - Ryze ([www.ryze.com](http://www.ryze.com))-Another business-oriented social site, Ryze has more than 500,000 members and offers a number of special interest networks.
  - XING ([www.xing.com](http://www.xing.com)) - An active business-oriented social networking site that is particularly popular in Europe. XING was renamed from openBC/Open Business Club in November 2006.
  - YouTube ([www.youtube.com](http://www.youtube.com)) - The world's most popular video-sharing site.
- Want even more options? Niche social networking is a hot trend, with microsites sprouting up for almost every conceivable niche audience. Some examples include
- aSmallWorld ([www.asmallworld.net](http://www.asmallworld.net)) - By invitation only, for celebrities and the business elite
  - BlackPlanet.com ([www.blackplanet.com](http://www.blackplanet.com))-Emphasizing connections between African Americans
  - 85 Broads (<https://secure.85broads.com>) -For career women who attended a select list of leading universities
  - CafeMom ([www.cafemom.com](http://www.cafemom.com)) - A networking site for mothers
  - Dogster ([www.dogster.com](http://www.dogster.com)) - For dog lovers everywhere
  - Gaia ([www.gaia.com/community](http://www.gaia.com/community)) - For the socially conscious crowd
  - GLEE.com ([www.glee.com](http://www.glee.com)) - For the gay and lesbian community
  - MilitaryPlanet ([www.militaryplanet.com](http://www.militaryplanet.com)) - For members of the military
  - New England Venture Network ([www.venturenetwork.vc](http://www.venturenetwork.vc)) - Social networking for venture capitalists
  - Ning ([www.ning.com](http://www.ning.com)) - For do-it-yourselfers who want to create their own social network
  - Shelfari ([www.shelfari.com](http://www.shelfari.com)) - A site for book lovers and authors
  - ShoutLife ([www.shoutlife.com](http://www.shoutlife.com)) - A Christian social network
  - Ultrafan ([www.ultrafan.com](http://www.ultrafan.com)) - For sports fans
- Although these "person-to-person" sites represent the most common type of social networking, other sites also fall under the realm of the somewhat fuzzy definition of social networking.
- These include
- Photo-sharing sites - Flickr ([www.flickr.com](http://www.flickr.com)), Zoomr ([www.zoomr.com](http://www.zoomr.com)), and Photobucket ([www.photobucket.com](http://www.photobucket.com)).
  - Social bookmarking sites - Digg ([www.digg.com](http://www.digg.com)), del.icio.us (<http://del.icio.us>), and StumbleUpon ([www.stumbleupon.com](http://www.stumbleupon.com)), which enable you to share your favorite sites and news stories with other users.
  - Micro-blogging sites - Twitter ([www.twitter.com](http://www.twitter.com)), Pownce ([www.pownce.com](http://www.pownce.com)), and Jaiku ([www.jaiku.com](http://www.jaiku.com)), which merge brief blog-like text updates with social networking functionality.
  - Video-sharing sites - Revver ([www.revver.com](http://www.revver.com)), Veoh ([www.veoh.com](http://www.veoh.com)), and Google Video ([video.google.com](http://video.google.com)), as well as the frontrunner YouTube.
- Savvy social networkers have found ways to promote their businesses, products, and causes - and even themselves - on the variety of social networking sites available on the web.

Source & Courtesy: <http://www.informit.com/articles/article.aspx?p=12181>

## National Conference on Information and Software Engineering

13 – 14, Feb, 2009 at Triple Helix Auditorium, CLRI, Chennai.

*Organized by*

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**Programme Highlights:** The two days National Conference has two main tracks presenting special lectures by the eminent persons from industries/academia on various topics as detailed below:

*Theme 1: Information Engineering:* Internet Information Infrastructure; Information Quality; Enterprise Information System; Strategic Information System; Supply Chain and Risk Management; Data-mining and Data-Warehousing; Web Engineering and Applications; Information Security.

*Theme 2: Software Engineering:* Software Requirements and Formal Specifications; Software Process Models; Software Metrics; Software Reliability; Software Architectures and Components; Software Testing; Software Verification and Validation; Software Project and Risk Management; Software Quality; Software Safety and Security.

**Important Deadlines:** Paper submission: 31<sup>st</sup> Dec, 2008; Intimation of acceptance: 9<sup>th</sup> Jan, 2009; Registration: 23<sup>rd</sup> Jan, 2009.

**Registration:** Industrial Delegates: Rs. 1500; Academic Staff / Members of CSI/IEEE: Rs. 1000; Academic Staff (CSI/IEEE members): Rs. 750; Students & Research Scholars; Rs. 500; CSI/IEEE Student members: Rs. 250. The registration fee is payable in the form of Demand Draft drawn in favor of "The Principal, AVIT" and payable at Chennai. The delegates should send the filled in Registration form, DD, copy of ID card and a copy of IEEE/CSI membership card (if applicable) to the Convener.

Accommodation can be arranged for the outstation participants in the College Hostel with prior request.

**Address for Correspondence:** Dr. A. Anthony Irudhayaraj, Convener, NCISE, Department of Information Technology, Aarupadai Veedu Institute of Technology, Paiyanoor – 603104, Tamil Nadu. Phone: 09443884732, 09444812756, Email: ncise2009@gmail.com

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