

The



IEEE Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NJ Section PACE:

Engineers Meet: How to Interface with Congress and Make an Impression

On Wednesday, October 13, 2010, the North Jersey Section Professional Activities Committee (PACE) of IEEE will meet for a presentation concerning making things happen in Washington. Off-Shoring of Manufacturing, importing foreign engineers and discriminating against our U.S. engineers need to be addressed. But, it isn't enough to talk among ourselves about these problems – we have to bring our concerns to Washington. Our guest speaker Russell T. Harrison Senior Legislative Representative - Grassroots Affairs, IEEE-USA, will tell us how.

About the Meeting:

This meeting will be dedicated to successfully interfacing with our representatives in Washington. The American political system is relatively easy to interact with – if you know a few key rules and tricks. Regardless of what your personal concerns are, this session will help you understand how political decisions are made and how engineers can play a role in making them.

All interested parties are invited for an interesting and informative presentation.
About the Speaker:

Russell has a BA in Political Science, with minors in History and Communications, from Allegheny College. He also has a Masters in Public Policy from the University of Maryland and earned his CAE certification in 2009.

Russell is the Senior Legislative Representative for Grassroots Activities for IEEE-USA, where he is responsible for helping IEEE members in the U.S. interact with, and ultimately influence, elected officials.

Since joining IEEE-USA in 2005, Russell has become one of the most sought-after speakers on the IEEE staff, having addressed nearly 140 local IEEE groups in the United States. His talks focus on current public policy issues, how

From the North Jersey Section's Education Committee:
**Hot courses can enhance your position in
the job market**

IEEE North Jersey Education Committee ran programming and management courses since 1993. 252 IEEE members and non-members completed these courses. Benefits: Some got jobs at AT&T and Microsoft Corporation.

We need hot courses, instructors and classrooms. If you can teach a hot course (any course that can get people jobs), email your one-page abstract and your resume. If your NJ firm can provide a conference room, evening or Saturday morning, contact Donald Hsu, Chair, yanyou@hotmail.com.
Thank-you and act NOW!

they will impact the engineering profession and what individual engineers can do about them.

Prior to IEEE-USA, Russell directed grassroots programs at the Institute of Scrap Recycling Industries and the American Iron and Steel Institute. In these positions he represented the recycling and steel industries on Capitol Hill and in state capitols on a variety of issues as a professional lobbyist.

All Welcome!

Members and students from all professional societies and engineering disciplines are welcome. We now have attendees from IEEE, ASME, NSPE, ASCE and AEA. For information about these groups see:

www.aea.org
www.ieeeusa.org/policy/care
www.ieeeusa.org
www.programmersguild.org
<http://web.njit.edu/~ieeenj/>
www.asme.org/sections/northjersey

Time: 6:30 PM to 9:00 PM, Wednesday, October 13, 2010. Refreshments will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500.

Information: Paul Ward, (973) 790-1625, peward@ieee.org, Richard F. Tax, (201) 664-6954, rtax@aea.org.

OCTOBER 2010

October 2010

Volume 57, Number 3

Publication No: USPS 580-500

"The IEEE Newsletter" (North Jersey Section), is published monthly except June and July by The Institute of Electrical and Electronics Engineers, Inc. Headquarters: 3 Park Avenue, 17th Floor, New York, NY 10016-5997. \$1.00 per member per year (included in annual dues) for each member of the North Jersey Section. Periodicals-class postage paid at New York, NY and at additional mailing offices. Postmaster send address changes to: "The IEEE Newsletter", 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331. USPS 580-500 (ISSN 1076-3732).

NEWSLETTER STAFF

Editor Keith Saracinello
Business Manager..... Keith Saracinello
k.saracinello@ieee.org (302) 683-7162

Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be sent to the Business Manager via e-mail at k.saracinello@ieee.org or to *The IEEE Newsletter*, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551, (302) 683-7162.

IEEE NJ SECTION HOME PAGE

<http://web.njit.edu/~ieeenj/>

IEEE NJ SECTION NEWSLETTER HOME PAGE

<http://web.njit.edu/~ieeenj/NEWSLETTER.html>

REPORT ADDRESS CHANGES TO:

IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, (732) 981-0060. It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE Newsletter" and other section mailings use a list provided by IEEE's national headquarters.

SECTION OFFICERS

Chair Amit Patel
a.j.patel@ieee.org
Vice-Chair-1..... Dr. Sanghoon Shin
s.shin@ieee.org (973) 492-1207 Ext. 22
Vice-Chair-2..... Dr. Naresh Chand
naresh.chand@baesystems.com (973) 636-7408
Treasurer..... Vacant
Secretary..... Russell Pepe
rcpepe@ieee.org (201) 960-6796

Members-at-Large:

Pete Donegan (doneganp@ieee.org)
Dr. Katherine Duncan (kduncan@ieee.org)
Dr. Mengchu Zhou (zhou@njit.edu)

The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Russell Pepe at (201) 960-6796, rcpepe@ieee.org.

NJ AESS:

A Practitioner's Guide to Leadership

On October 13, 2010, the IEEE NJ Section Aerospace will host a talk on "A Practitioner's Guide to Leadership." The speaker will be Dr. Barry L. Shoop.

About the Talk

Leadership can be defined as the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organizations of which they are members. Leadership is not dependant on title or formal authority. All too often we think of leadership as something we will develop and apply later rather than earlier in our career. This applies to both leadership within our chosen technical discipline and leadership of our profession. In the early stages of a career, most people naturally focus on the technical aspects of their career. They begin their careers applying the technical disciplinary knowledge and skills they acquired in college and focus on those aspects that will ensure promotion, tenure, and success early in their career. However, leadership is something that should be considered and fostered early and often throughout our entire professional career.

This presentation will cover a mixture of traditional and non-traditional topics associated with leadership. Leadership development, leadership theories, leadership traits and differences between leaders and managers are subjects traditionally found in texts on leadership. Team composition and diversity of opinion, understanding individual and group dynamics, and meetings are not subjects traditionally found in leadership texts. The topical diversity is intended to provide practical insights and applications of leadership theory.

This presentation motivated the IEEE-USA eBook: *A Practitioner's Guide to Leadership* published in January 2009 (<http://www.ieeeusa.org/communications/ebooks/careers.asp>).

About the Speaker

Barry L. Shoop is Professor of EE and Deputy Head of the Department of Electrical Engineering and Computer Science at the United States Military Academy at West Point. During his seventeen years at West Point, he has served in a number of leadership positions including Director of the Electrical Engineering Program and Director of the Photonics Research Center. Currently he is responsible for an undergraduate academic department with over 70 faculty and staff supporting ABET accredited programs in electrical

engineering, computer science, and information technology. He received the BS from the Pennsylvania State University in 1980, MS from the U.S. Naval Postgraduate School in 1986, and PhD from Stanford University in 1992, all in electrical engineering. He is a Senior Member of the IEEE, a Fellow of both the Optical Society of America and the International Society for Optical Engineering, and a member of Phi Kappa Phi, Eta Kappa Nu, and Sigma Xi. Professor Shoop has been active in the IEEE, serving as the Chair of the Mid-Hudson Section, Director of Region 1, IEEE Secretary and member of the IEEE Board of Directors from 2006 – 2010. He currently serves as the 2010 IEEE Vice President Member and Geographic Activities.

All Welcome!

You do not have to be a member of the IEEE to attend the talks but please register at http://meetings.vtools.ieee.org/meeting_view/list_meeting/3099 by October 10, 2010. Come and bring your friends.

If you are not a US citizen or permanent resident, please send your name, employer's name, citizenship, and passport # to Dr. Naresh Chand by October 10, 2010. Please use your email subject as "IEEE AESS talk".

Time: 7:00 - 8:30 PM, Wednesday, October 13, 2010. Free buffet will begin at 6:00 PM.

Place: BAE Systems, 164 Totowa Road, Wayne, NJ 07474.

Information: Dr. Naresh Chand, (973) 633-6310, naresh.chand@baesystems.com.

Elevate to Senior Member Grade!

To get information and an application to advance to Senior Member Grade, see <http://www.ieee.org/web/membership/senior-members/>. For further information or to find potential references, contact Mario Ogava, Membership Chair, at m.ogava@ieee.org.

IEEE North Jersey Section Activities

October 2010

Oct. 5 – “Steganography and Steganalysis: Fundamentals, and Some New Developments” by Lifang Yu, NJ SP & SAC, 10:30 AM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren & Summit Streets), Newark, NJ. Yun Shi, shi@njit.edu, (973)-596-3501, Alfredo Tan, tan@fd.edu, (201) 692-2347, and Hong Man, hman@stevens-tech.edu, (201)-216-5038.

Oct. 6 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, Clifton Public Library - Allwood Branch, 44 Lyall Road, Clifton, NJ 07012. Russell Pepe at rpepe@ieee.org.

Oct. 7 – “2010 MTT/AP Symposium and Mini-Show” – MTT-S/AP-S Chapter, 9:00 AM - 4:30 PM, Hanover Manor, 16 Eagle Rock Avenue, E. Hanover, NJ. Kirit Dixit (201) 669-7599 (kdixit@ieee.org), Art Greenberg (a_gadner1@optonline.net), Har Dayal (973) 628-7394 (dayalhar@gmail.com), or George Kannell (973) 386-4170 (gkk@lgsinnovations.com).

Oct. 7 – “Student Branch IEEE Day Bowling Event”, 5:30 PM to 7:00 PM, Stevens Institute of Technology Bowling Alley, 1 Castle Point on the Hudson, Hoboken, NJ. For questions or more information, contact IEEE@gmail.com.

Oct. 9 – Dec. 4 – “Project Management” by Donald Hsu, PhD, 9:30 AM to 12:00 PM, NJIT, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Oct. 12 – “Digital Insecurity” by Arthur J. Hedge III, NJ Computer Society, 7:00 PM, Conference Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ. Michael Malm, (201) 355-6167, mmalm@ieee.org, or Prof. Hong Zhao, (201) 692-2350, zhao@fd.edu.

Oct. 13 – “A Practitioner’s Guide to Leadership” by Dr. Barry L. Shoop, NJ AESS, 7:00 – 8:30 PM, BAE Systems, 164 Totowa Road, Wayne, NJ. Dr. Naresh Chand, (973) 633-6310, naresh.chand@baesystems.com.

Oct. 13 – “Engineers Meet: How to Interface with Congress and Make an Impression” with Russell T. Harrison, NJ PACE, 6:30 PM to 9:00 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625, peward@ieee.org, Richard F. Tax, (201) 664-6954, rtax@aea.org.

Oct. 15 – “Web training for IEEE R1 Student Members on How to Design and Develop a Micromouse” by Soon Wan, NJ SAC, 12:00 PM - 1:00 PM. Register at: http://meetings.vtools.ieee.org/meeting_view/list_meeting/2835. Jignasa Ray, jignasa.ray@ieee.org.

Oct. 20 – Dec. 15 – “C# .NET Programming” by Donald Hsu, PhD, 6:30 PM to 9:00 PM, NJIT, Newark, NJ. Donald Hsu, yanyou@hotmail.com.

Oct. 28 – Nov. 18 – “Developing Your Presentation Skills – Tips & Techniques” by Wilma Hurwitz, 6:30 PM to 9:00 PM, Technical Marketing, Suite 113, 1719 Route 10, Parsippany, NJ. Larry Yang, yangl@ieee.org.

Oct. 28 – “Life Grade Luncheon”, Hamilton Park Conference Center, Florham Park, NJ. Ken Oexle (973) 386-1156.

Upcoming Meetings

Nov. 3 – “NJ Section Meeting”, 6:30 PM, “Executive Committee Meeting” - 7:00 PM, Clifton Public Library - Allwood Branch, 44 Lyall Road, Clifton, NJ 07012. Russell Pepe at rpepe@ieee.org.

Dec. 1 – “NJ Section Annual End-Of-Year Workshop”, location TBD. Amit Patel, a.j.patel@ieee.org.

Members and Non-Members Welcome
PLEASE POST

NJ Computer Society: **Digital Insecurity**

On Tuesday, October 12, 2010, the IEEE North Jersey Section Computer Society Chapter will host a presentation entitled "Digital Insecurity" by Arthur J. Hedge III.

About the Talk

The amount of digital information is growing at an exponential rate. As it becomes more and more valuable the number of data breaches and risk of data loss faced by individuals, organizations, and countries continue to grow. Mr. Hedge will cover what the digital world looks like today, what the threat landscape is, and how we can protect ourselves.

- Threats faced by individuals
- Threats faced by organizations
- What you can do about it
- What organizations can do about it

About the Speaker

Arthur Hedge is the President of Castle Ventures LLC. Castle Ventures is an Information Technology consulting firm focused on security. Mr. Hedge has over 20 years of consulting experience in the IT field. Mr. Hedge is a graduate of the Massachusetts Institute of Technology. He lives in New Jersey with his wife and two sons. He is a member of a number of professional organizations, including Information Systems Security Association (ISSA), and the Open Web Application Security Project (OWASP). Mr. Hedge serves as a mentor for Columbia University's Technology Management program. He is a frequent speaker and writer on technology subjects.

All Welcome!

You do not have to be a member of the IEEE to attend. Bring your friends and network before the meeting.

Registration is required by contacting Howard Leach (973) 540-1283, h.leach@ieee.org. The room is limited to 20 people.

Time: 7:00 PM, Tuesday, October 12, 2010. Pre-meeting pizza and soda will be offered at 6:00 PM.

Place: Conference Room, Morris County Library, 30 E. Hanover Ave, Whippany, NJ, (973) 285-6930.

Information: Michael Malm, (201) 355-6167, mmalm@ieee.org, or Prof. Hong Zhao, (201) 692-2350, zhao@fdu.edu.

North Jersey Section Seeks Committee Chairs and Volunteers

The North Section is seeking new volunteers to help conduct business for the benefit of its membership. There are a variety of volunteer positions open and available. They range from technical to non-technical, leadership or just participatory. For Society Chapter Chairs, you **MUST** be a member of the corresponding IEEE Society.

If you would like to become involved with volunteering in some of these efforts or positions or just become more informed about what is happening at the North Jersey Section, please contact Dr. Chandra Gupta at c.gupta@ieee.org. You are welcome to attend the Section business meeting held the first Wednesday of every month to find out more and other volunteer activities that require some help.

Some committees needing volunteers include the following. Please contact the person indicated for additional information.

- Aerospace and Electronic Systems Society Chair – contact naresh.chand@baesystems.com
- Power Electronics Society Chapter Chair - contact c.gupta below.
- GOLD (Graduates of the Last Decade) Affinity Group Volunteers and Committee members needed - contact northjerseygold@ieee.org
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact kduncan@ieee.org
- EMBS (Engineering in Medicine and Biology Society) is seeking a chair and active committee volunteers - contact RaquelPC@njit.edu
- Membership Development Committee Chair and Volunteers – contact kduncan@ieee.org.
- Computer Society Chapter Committee Volunteers – contact zhao@fdu.edu.
- Technical Management Council Committee Volunteers – contact saumil@ieee.org
- North Jersey Section Awards Committee Volunteers – contact k.oexle@verizon.net

Additionally, if interested volunteers would like to get more general information about the Section, including a complete listing of all chapters and committees, visit the North Jersey Section website <http://web.njit.edu/~ieeenj/>, or contact Dr. Chandra Gupta c.gupta@ieee.org.

North Jersey Section to Hold Senior Member Drive at Its December Executive Committee Meeting

The IEEE North Jersey Section is proud to announce its annual end of the year workshop agenda and relevant changes affecting members. Each year, the election results for new officers for the North Jersey section for the following year are announced by the tellers committee by the December executive committee meeting. The new officers are then installed and take office in the coming January.

This year will be different from year's past with a newly expanded agenda for the December executive committee meeting. In addition to the normal election result announcements, this year a number of key topics have been added in response to member requests.

A number of section IEEE members and non-members have been inquiring how they can become more informed about and involved with the section and different IEEE activities being held throughout the year. Some from just increased attendance and others from increased active participation and volunteering for different activities and events.

Also, many members have inquired how they can apply for a senior-member grade elevation and go about obtaining required references for their senior member application.

With the membership interests in mind, the end of the year executive committee meeting will have its agenda changed to hold an information session on the Senior Membership grade elevation process and an opportunity to interact with current senior members to find that last missing reference match for those seeking senior membership with an active application in process. If you have not started your senior membership application yet, start now and have your references completed by the end of the year.

All section members are invited to attend, especially those who are current senior members and are willing to serve as references, those interested in learning how to stay better informed of section and area wide IEEE activities that are occurring. For those interested in becoming more active in general IEEE activities, volunteering, or those seeking senior membership.

The event will be held on Wednesday, December 1, 2010, 6-9PM at a final location to be determined. Stay tuned to

the newsletter and website for additional information about registering for this event.

Dear North Jersey IEEE Student Members!

I hope all of you have enjoyed your summer and are preparing for the beginning of yet another wonderful fall semester for your student branches. As you may be aware, the Region 1 Student Activities Committee hosts an annual Student Conference in the Spring where there are a number of competitions that students can compete in. One of our most well-known and exciting competition is the Micromouse Competition.

In preparation for our 2011 Student Conference, we are offering a Micromouse web training on Friday, October 15, 2010 from Noon to 1PM. This training will give you an insight into how to successfully design and develop your own micromouse. Please see the SAC announcement in this Newsletter for registration details and note that this is only available to the first 50 student registrants. So, HURRY and register now.

Also, be on the lookout for details on the Student Branch Leadership Training Workshop being planned at CCNY (NYC) on Saturday, November 6th.

Finally, we are also planning a special "IEEE DAY" event for North Jersey Student Members at Stevens Institute of

Technology on October 7th. Please take this opportunity to meet other student branch leaders from various schools in the area and the North Jersey Section volunteers. I look forward to a great year for student activities!

Best Regards,
Jignasa Ray, P.E.
North Jersey Section SAC Chair
R1 Student Activities Chair
jignasa.ray@ieee.org

NEWS from IEEE-USA IEEE-USA Urges Congress to Permanently Extend R&D Tax Credit

Washington (7 September 2010) - IEEE-USA urges Congress to make the research and development (R&D) tax credit permanent. The White House is expected to propose it Wednesday.

"Making the R&D tax credit permanent would provide corporations some needed economic predictability in these turbulent times," IEEE-USA President Evelyn Hirt said. "The credit reduces the monetary risk of investing in research that might not result in profitable products and systems for many years. The technologies U.S. companies develop or improve will ultimately have a positive effect on U.S. competitiveness, the growth of small businesses and job creation."

The R&D tax credit reduces a

company's federal tax liability based on the money it spends researching and developing new products or improving existing ones. Credit can be taken for such things as salaries and wages, contract research (65 percent), supplies and patent attorney fees.

The R&D tax credit -- officially known as the Research and Experimentation tax credit -- was created by Congress in 1981 as a temporary measure. It has lapsed on several occasions and been extended 13 times. The most recent credit expired in December, causing unease among companies about whether they should continue current levels of R&D investment. Making the credit permanent would provide a level of certainty to businesses that money they invest in R&D will receive the credit.

IEEE-USA has supported permanent extension of the tax credit for many years. It reconfirmed its support in June with a position that reads, in part, "By providing an incentive for expanding private-sector investments in technology, the R&D tax credit improves productivity and encourages technological innovations that help sustain U.S. competitiveness, create jobs and ensure our national security." See <http://www.ieeeusa.org/policy/positions/RDTaxCredit0610.pdf>.

Contact:
Chris McManes
IEEE-USA Public Relations Manager
202-530-8356
c.mcmanes@ieee.org

In Memoriam



Won Kim P.E., IEEE Life Member, passed away on May 31.

Won had been an active member of the North Jersey Section over the past 30 years, especially with the Power & Energy Society (PES) and Industrial Applications Society (IAS) chapters. Among his many contributions to the Section: he served on the PES/IAS Technical Seminar Committee, was a seminar presenter, facilitated the registration of international attendees at the PES Winter Power Meeting, served on the MTT/AP Annual Symposium Registration Committee and assisted at the Annual Awards Reception and Life Grade Lunch

Both Region 1 IEEE and the Industrial Applications Society recognized Won with awards for his contributions and service to the Section, IAS Chapter and the engineering community.

In addition to his IEEE activities, Won was an active member of the Union County Society of Professional Engineers, serving as an officer of that organization.

During his professional career he was engaged in engineering activities at Motorola, Wakefern, and Schering-Plough. In recent years he served as an engineering consultant, an instructor for PSE&G and an Adjunct Professor at Union County College.

Won is survived by his wife Haekyung, two sons Howard and John, and four grandchildren.

NJ SP Society & SAC:

Steganography and Steganalysis: Fundamentals, and Some New Developments

On October 5, 2010, the NJ Signal Processing Society and Student Activities Committee will be hosting a lecture at NJIT on "Steganography and Steganalysis: Fundamentals, and Some New Developments". The speaker will be Lifang Yu.

About the Talk

Steganography is the science and art of hiding messages in such a way that no one, apart from the sender and intended recipient, suspects the existence of the secret communication. Hence it is a form of security through obscurity, which is rather different from cryptography which does not hide existence of secret message. Steganalysis is the science and art of detecting the existence of secret message. Unlike cryptanalysis, where it is obvious that intercepted data contains a message (though that message is encrypted), steganalysis generally starts with a pile of suspect data files, but little information about which of the files, if any, contain a secret message. Multimedia files are popularly used for digital steganography because of their large size and popular utilization in our daily life.

In this talk, the fundamentals of steganography and steganalysis are first introduced. Afterwards, some typical algorithms of steganography and steganalysis are described. Finally, some new developments and future research are discussed.

About the Speaker

Ms. Lifang Yu received the BS degree from the Department of Computer Information and Technology, Beijing Jiaotong University, China in 2006. Since then, she has been a PhD student and candidate in Beijing Jiaotong University majoring in Signal and Information Processing. In October 2009, she started her one-year visit at New Jersey Institute of Technology. Her research interests are in steganography and steganalysis, forensic, watermarking, and pattern recognition. She has six published works in conference and journals.

Time: 10:30 AM, Tuesday, October 5, 2010. Light refreshments will be offered at 10:15 AM.

Place: New Jersey Institute of Technology (NJIT), Room 202, ECE Center (Intersection between Warren &

Summit Streets), Newark, NJ. Directions are available at <http://www.njit.edu/University/Directions.html>.

Information: Yun Shi, shi@njit.edu, (973)-596-3501, Alfredo Tan, tan@fd.edu, (201) 692-2347, and Hong Man, hman@stevens-tech.edu, (201)-216-5038.

NEWS from IEEE-USA

IEEE/IEEE-USA Seek Nominations for 2011

"New Faces of Engineering"

Recognition Program

Washington (3 September 2010) - Nominations are now open for a younger engineer to be recognized as the IEEE/IEEE-USA's 2011 "New Face of Engineering."

The Engineers Week (EWeek) "New Faces of Engineering" program recognizes engineers new to the profession with outstanding educational and career accomplishments. The program is open to IEEE members worldwide.

"New Faces" is designed to promote the importance of technical education, celebrate engineering careers and recognize significant contributions to the engineering profession and society. Each year, the EWeek website (www.eweek.org) features the photos and biographies of five notable young engineers from each EWeek sponsoring society. In addition, each society's top nominee is recognized during EWeek in a full-page ad in USA Today. http://www.eweek.org/Site/pdfs/USA_Today_Ad.pdf. EWeek 2011 is 20-26 February.

To be eligible for recognition, engineers must be 30 or younger as of 31 December 2010, have a degree in engineering from a recognized U.S. college or university or equivalent international educational institution. Degrees in engineering technology, science, computer science and similar disciplines do not qualify; a degree in computer engineering is acceptable. IEEE/IEEE-USA nominees must be an IEEE member.

Judges will evaluate nominees based on their educational attainment, engineering achievements and participation and accomplishments in professional and technical society activities. Particular consideration is given to work (e.g. volunteering, publishing, conference presentations) in IEEE technical societies.

IEEE nominations can be submitted through IEEE regional directors, section and GOLD chairs, or independently, and should be directed to Sharon Richardson at s.richardson@ieee.org. Self-nominations are not permitted. The nomination form and more information are available at <http://www.ieeeusa.org/communications/eweek/newfaces/default.asp>.

The deadline for all IEEE nominations is 15 October 2010.

The "New Faces of Engineering" program was the American Society of Heating, Refrigerating and Air Conditioning Engineers' (ASHRAE) legacy project for EWeek 2003. The program is now in its ninth year. Among the IEEE/IEEE-USA's "New Faces" were Deborah Zwitter, IBM Corporation (2003); Dr. Mark Hersam, Northwestern University (2005); Dr. Carlos Cordeiro, Philips Research North America (2007); and Sanna Gaspard, TLneoCare, LLC (2010).

Gaspard was featured in the Sept. 2010 print edition of IEEE's newspaper, The Institute: <http://bit.ly/d4nj0J>.

Sponsored by more than 100 engineering, science and education societies, as well as major corporations dedicated to increasing public awareness and appreciation of engineering, EWeek is celebrated annually by thousands of engineers, engineering students, teachers and leaders in government and business. IEEE served as lead society during EWeek 1993 and 2004.

Raytheon Company and ASHRAE are serving as EWeek 2011 co-chairs.

Contact:

Chris McManes
IEEE-USA Public Relations Manager
Phone: 1 202 530 8356
E-mail: c.mcmanes@ieee.org

Life Grade Luncheon

The PES Chapter and the Section will sponsor a luncheon for North Jersey IEEE Life Grades (Members, Senior Members and Fellows) on Thursday, October 28, at

Hamilton Park Conference Center
175 Park Avenue
Florham Park, NJ 07932

The luncheon will begin at 11:30 AM in the Terrace area. Cost is \$ 5.00 per person

Advance registration is required prior to October 19. We can accommodate only 30 people. Registrations will be processed in the order of receipt and will be confirmed by return mail. Please complete the following registration form and include a check payable to the North Jersey Section IEEE in the amount of \$ 5.00 per person.

Reservations cannot be accepted at the door. For additional information regarding the event contact Ken Oexle at (973) 386-1156.

IEEE Life Grade Luncheon Registration NJ - October 28, 2010

Name _____

Address _____

Phone _____

IEEE # _____ Life Grade ____ Yes

Return to: Ken Oexle
11 Deerfield Rd
Whippany, NJ 07981

Prior to October 19 and enclose \$5.00. Make check payable to **NJ Section IEEE**



THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS, INC.

IEEE NORTH JERSEY SECTION

MTT-Society and AP-Society Joint Chapter

PRESENT

25th ANNUAL SYMPOSIUM AND MINI-SHOW

FOCUS:

**SELECTED TOPICS IN RF AND MICROWAVE TECHNOLOGIES FOR
COMMERCIAL AND MILITARY APPLICATIONS**

DATE: THURSDAY OCTOBER 7, 2010

PLACE: Hanover Manor, 16 Eagle Rock Ave., E. Hanover, NJ 07936. Ph#973-992-7425

SCHEDULE OF EVENTS

9:00 AM TO 4:30 PM

TECHNICAL SESSIONS

**10 –12 LECTURES FEATURING SPEAKERS FROM LEADING
COMPANIES, WITH EMPHASIS ON MILITARY ELECTRONICS,
WIRELESS TECHNOLOGIES AND MICROWAVE COMMUNICATIONS**

**MINI SHOW FEATURING LATEST PRODUCTS
(APPX. 30-40 EXHIBITORS)**

(COMPLIMENTARY LUNCH SERVED)

Details of the schedule and speakers and the topics will be posted on the IEEE North Jersey Section Home page <http://www-ec.njit.edu/~ieeenj/NEWSLETTER.html> by September 2010.

For further information contact:

CHAIR/EXHIBITION: KIRIT DIXIT (201-669-7599), kdixit@ieee.org

PUBLICITY: ARTHUR GREENBERG, gadner1@optonline.net

EVENT/ LOCATION CO-ORDINATOR: KEN OEXLE (973-386-1156), k.oexle@verizon.net

CO-CHAIR – TECHNICAL PROGRAMS : HAR DAYAL, dayalhar@gmail.com

CO-CHAIR - TECHNICAL PROGRAM: GEORGE KANNELL (973-437-9990),
gkk@lgsinnovations.com

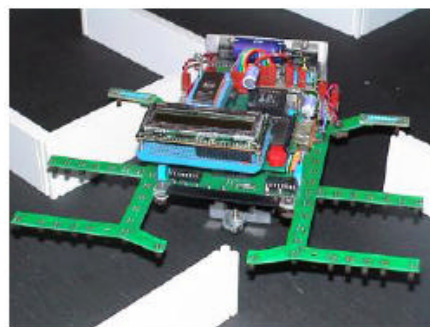
THERE IS NO CHARGE TO ATTEND THE SYMPOSIUM OR SHOW



Presents Web training for IEEE R1 Student Members on
“How to Design and Develop a Micromouse”
Friday, October 15, 2010
12:00PM (noon) – 1:00PM

Abstract:

A Micromouse is a small robot vehicle that is able to navigate its way through an unknown maze. It is autonomous, battery-operated and self-contained, encompassing computer technology, robotics and artificial intelligence. The main challenge for the Micromouse designers is to import the Micromouse with an adaptive intelligence which enables exploration of different maze configurations, and to work out the optimum route with the shortest run time from start to destination and back. In addition, the Micromouse must reliably negotiate the maze at a very high speed without crashing into the maze walls.



The annual IEEE Region 1 Student Conference hosts the Micromouse Competition. The objective of the competition is to build a Micromouse that can negotiate a specified maze in the shortest time. This on-line webinar will introduce the design and development of the hardware and software of a Micromouse. The take away will be the fundamental knowledge with best practices and design strategies to build a Micromouse, and be ready for the 2011 Region 1 Micromouse Competition.

Speaker Bios:



Soon Wan graduated from Ngee Ann Polytechnic (Singapore) as the top student with the highest merit diploma, and graduated with Summa Cum Laude in Electrical and Computer Engineering at Merrimack College (North Andover, MA). At Ngee Ann, Soon developed several Micromice, and has won the 1992 International Micromouse Competition in Hong Kong. Soon developed a new Micromouse when he came to Merrimack College, and won the 1997, 1998, and 1999 Region 1 Micromouse competition. Soon has also entered several APEC International Micromouse competitions since 1999, and his Micromouse has been titled as the most reliable mouse.

Please register at: http://meetings.vtools.ieee.org/meeting_view/list_meeting/2835

Registration is limited to the first 50 registrants!!!

If you have any questions, please email R1 SAC Chair, Jignasa Ray at jignasa.ray@ieee.org.

IEEE North Jersey Section Course C# .NET Programming

Wednesday, October 20, 2010 through December 15, 2010
Eight weekly classes (October 20, 27, November 3, 10, 17, December 1, 8, 15, 2010)
Location: New Jersey Institute of Technology
Newark, New Jersey 07102 (Checks should not be mailed to this address)

IEEE North Jersey Section thanks New Jersey Institute of Technology, for sponsoring this course.

The IEEE North Jersey Section is offering a course "C# .NET Programming". Since 2004, C# .NET has generated significant headway in Fortune 1000 enterprise development systems. Dice.com lists 1000+ C# .NET jobs in the New York tri-state area daily! This course will cover the fundamentals of C# language, the .NET framework, window and web-based applications, ADO.NET, ASP.NET, and XML. It will be useful for anyone to develop applications based upon these tools.

You will receive the IEEE Certificate of Completion when you finish the course. Microsoft Corp. has MCAD and MCSD certifications. You may wish to get certified by taking the necessary Microsoft exams with the knowledge gained from this course.

Instructor: **Donald Hsu, PhD**, has been a corporate manager for 11 years and is an experienced trainer. Since 2004, he has trained 850+ people in C++, Java, WebLogic, Database, XML, and C# .NET courses in 8 organizations.

TOPICS

1. Compare the enterprise development tools using Java to C# .NET
2. Define Visual Studio .NET Version 2008
3. Identify C# syntax, data type, control structures and common language runtime
4. Distinguish methods, arrays, object-oriented programming
5. Build graphical user interface, multithreading, files and streams
6. Explain the benefit of using extensible markup language (XML)
7. Select database, SQL server, and ADO .NET
8. Choose ASP .NET, web forms, web services, advanced topics
9. Present student Projects

WHERE: New Jersey Institute of Technology, Newark, NJ
WHEN: Eight evenings , October 20, 27, November 3, 10, 17, December 1, 8, 15, 2010, 6:30 to 9:00 PM.
COST: IEEE (& affiliate) members \$500; Non-IEEE members \$550.
CONTACT: Donald Hsu, yanyou@hotmail.com

REGISTRATION: C# .NET Programming

Please mail the completed registration with a check (payable to "North Jersey Section IEEE") to:
Donald Hsu, Chair Education Committee, IEEE North Jersey Section, P.O. Box 2093, Fort Lee, New Jersey 07024.

Name: _____ Email address _____

Non-member

IEEE Member Member #: _____ Member of _____ technical society

Employer: _____

Employer Address: _____

Home Address: _____

Business (day) telephone #: _____ Home telephone #: _____

Please enclose required fee payable to: **North Jersey Section IEEE**

As soon as the completed registration form and the payment are received, you are officially registered for this course.
Registration status will be confirmed by email.

I wish to receive IEEE Completion Certificate

Signature: _____

IEEE North Jersey Section Course Project Management

*Saturday Mornings, October 9, 2010 through December 4, 2010
Eight weekly classes (October 9, 16, 23, 30, November 6, 13, 20, December 4, 2010)
New Jersey Institute Technology, Newark, New Jersey
(Checks should not be mailed to this address)*

IEEE North Jersey Section thanks New Jersey Institute Technology for sponsoring this course

The North Jersey Section IEEE is offering a course "Project Management". Dice.com lists 4,000+ Project related jobs in the New York tri-state area daily! This course will help you to break down a master project into manageable tasks, pinpoint possible solutions, and provide information to keep the project under control. Using Microsoft Project software, you will learn to accomplish various project plans. In addition, it will greatly enhance your business, communications and interpersonal skills.

You will receive the IEEE certificate of completion when you finish the course. You may wish to take two Certification exams, one in *Project Management* administered by Project Management Institute from the knowledge that you learned in this course. (This is *not* an exclusive PMP-PMI examination prep course. No PDUs are issued for PMP eligibility. CEU credits would be given by IEEE).

Instructor: **Donald Hsu, PhD**, has been a corporate manager for 11 years and is an experienced trainer. Since 2003, he has trained 900+ people in Contract Procurement, IT Project+, MS Project, and Project Management courses in eleven organizations.

TOPICS

1. Explain the need for a project manager
2. Define SOW, PERT, GANTT, CPM, and Scope of the project
3. Identify the team members, resources and plan for the strategy
4. Calculate schedule, budget variances, and monitor project progress
5. Manage changes, estimates, and communications
6. Set a baseline, import tasks from MS Excel, export Project files to MS Word
7. Create and modify custom reports, templates and combination views
8. Share resources and create a master plan loaded to Project Server
9. Approve updates and conclude a project plan
10. Analyze global E-Commerce and present student Projects

WHERE: New Jersey Institute Technology, Newark, NJ.

WHEN: 8 Saturdays, October 9, 16, 23, 30, November 6, 13, 20, December 4, 2010, 9:30 AM - 12:00 noon.

COST: IEEE (& affiliate) members \$500; Non-IEEE members \$550.

CONTACT: Donald Hsu: yanyou@hotmail.com

REGISTRATION: Project Management

Please mail the registration form with the check (**Checks payable to "North Jersey Section IEEE"**) to
Donald Hsu, Chair Education Committee, IEEE North Jersey Section, P. O. Box 2093, Fort Lee, NJ 07024

Name: _____ Email address _____

Non-member

IEEE Member Member #: _____ Member of _____ technical society

Employer: _____

Employer Address: _____

Home Address: _____

Business (day) telephone #: _____ Home telephone #: _____

Please enclose required fee payable to: **North Jersey Section IEEE**

As soon as a completed registration form and the payment are received, you are officially registered for this course. Registration status will be notified by email.

I wish to receive IEEE Completion Certificate

Signature: _____

IEEE North Jersey Section Course Developing Your Presentation Skills – Tips & Techniques

(Four weekly classes on Thursday, October 28, November 4, 11 & 18)

Location: Advanced Technical Marketing, Suite 113, 1719 Route 10, Parsippany, NJ 07054

(Do not mail checks here)

IEEE North Jersey Section thanks Advanced Technical Marketing for sponsoring this course.

If you are saying a few words” to a client prospect, giving a detailed explanation to some technical experts, interviewing for a new job or preparing a sales presentation, it can be a challenge to deliver an effective presentation. Developing Your Presentation Skills–Tips & Techniques will cover what it takes to plan, organize, develop and deliver effective presentations for any audience.

Instructor: **Wilma Hurwitz** has managed design, marketing and delivery of over 200 industry conferences, trade shows and special events on information technology; software project management; manufacturing; plastics, metals and packaging technology; financial services and supply chain management. Clients include Alcatel-Lucent (network systems), Honeywell, American Electronics Association, Administrative Management Society, Rutgers Center for Management Development, NYU School of Continuing Education and Boston University Center for Project Management. For some of these events she has been a presentation skills coach to individual software project managers and technical marketing/sales executives.

TOPICS

- Different kinds of presentations (informational, persuasive, good/bad news)
- Your audience and their expectations
- How to structure your presentation – key points, supporting information, presentation flow
- Selecting the right audio-visuals to get your points across
- Pre-performance practice and staging
- Actual performance -- on-site delivery considerations: problem listeners, handling nervousness, handling questions
- Post-presentation debrief – What went well? What needs improvement?

Methodology: This course is presented via class discussion, Q&A, case studies, exercises and actual practice in class. In order to provide individual attention, class size is limited to the first 12 registrations. Additional courses maybe held in the future. IEEE will be offering CEUs (PDUs) at an additional cost of \$25 per person if you would like to get CEU (1.0) or PDU (10 hours) credit.

WHERE: Technical Marketing, Suite 113, 1719 Route 10, Parsippany, NJ 07054

WHEN: Four evenings, October 28, November 4, 11, 18, 2010, 6:30 to 9:00 PM.

COST: IEEE members \$225; Non-IEEE members \$300; Student/Unemployed members \$125 (add \$25 for CEU/PDUs)

CONTACT: Larry Yang, yangl@ieee.org

DEADLINE: October 18, 2010 REGISTRATION: DEVELOPING YOUR PRESENTATION SKILLS – TIPS & TECHNIQUES

Please mail the completed registration with a check (payable to “North Jersey Section IEEE”) to:

Larry Yang, Chair GOLD Committee, IEEE North Jersey Section, 9 Braemar Court, Parsippany, NJ, 07054

Name: _____ Email address _____

___ Non-member

___ IEEE Member Member #: _____

Member of _____ technical society

Employer: _____

Employer Address: _____

Home Address: _____

Business (day) telephone #: _____ Home telephone #: _____

Please enclose required fee payable to: **North Jersey Section IEEE**

As soon as a completed registration form and the payment are received, you are officially registered for this course. Registration status will be notified by email.

___ I wish to receive IEEE CEUs/PDUs, \$25 extra

Signature: _____