



# IEEE Crosstalk



The Newsletter of the Mid-Hudson Section of the IEEE

Volume XXX, Sep. 2009

## Chairman's Corner

IEEE is a volunteer organization. At the Mid-Hudson Section, each year, we depend on volunteers to serve on the Executive Committee. The committee includes Section Chair, Vice Chair, Secretary, Treasurer, and chairs of technical societies and affinity groups, among others. It has been a tradition at Mid-Hudson Section that the Secretary would serve as the Vice Chair in the following year and as the Chair the year after. Hence, we are specifically seeking a nominee for the Secretary with a three-year commitment, beginning January 2010. For information about the function and responsibilities of the positions, please visit:

[http://www.ieee.org/web/geo\\_activities/units/Resources/Officer\\_Training/job-desc.html](http://www.ieee.org/web/geo_activities/units/Resources/Officer_Training/job-desc.html)

In addition, terms of a number of technical societies and affinity groups are ending. We are specifically seeking nominees for the Chairs of Computer Society and Women in Engineering. Please send your nomination (self nomination is welcome) to Ravi Todi ([rtodi@ieee.org](mailto:rtodi@ieee.org)) by the end of November 2009.

Our section's web site is in need an overhaul. We have some options, including Web-in-a-Box toolset that has been developed by IEEE volunteers. To evaluate our options and implement one, a working committee of volunteers is sought. If you have interest in this endeavor, please let me know.

Finally, congratulations to our recent elevated Senior Members:

- Kailash Marthi
- Jin-Ping
- Frederick Wong

In order to provide opportunities for our members to be elevated to Senior Member grade, we are organizing additional senior membership elevation events in conjunction with some of our fall technical society activities. More information will be included in the announcements. Information on Senior Member elevation can be found at

<http://www.ieee.org/organizations/rab/md/smforms.htm>.

## Upcoming Events

- Sep. 29<sup>th</sup> : GOLD Happy Hour
- Oct. 17<sup>th</sup> : Boat Ride on the Hudson @ West Point
- Nov. 3<sup>rd</sup> : Workshop on Cloud Computing
- Dec. 3-4: EDS-IBM Conference

- Computer Society News
- Section Members Receive IEEE Awards

## Mid-Hudson Section Leadership

<b>Chair:</b>	Baback Izadi
<b>Immediate Past Chair:</b>	Lisa Shay
<b>Vice Chair:</b>	Greg Kilby
<b>Treasurer:</b>	Brett Arteta
<b>Secretary:</b>	Ravi M. Todi
<b>Members-at-Large:</b>	Larry Boland Robert Atkins David Dittmann II
<b>Program Chair:</b>	Kwok Soohoo

### Society Chairs:

<b>Computer:</b>	<b>Open</b>
<b>Education:</b>	Fernando Guarin
<b>Electron Devices:</b>	Subramanian Iyer
<b>Power:</b>	Michael Spector
<b>WIE Affinity Group:</b>	<b>Open</b>
<b>GOLD Affinity Group:</b>	Joseph Ervin

### Student Activities

<b>Membership:</b>	<b>Open</b>
<b>Awards Chair:</b>	Casimer M. DeCusatis
<b>Newsletter Editor:</b>	Lisa Shay
<b>Associate Editor:</b>	Brett Arteta
	<b>Open</b>

<b>PACE Chair:</b>	Larry Winkler
<b>Publicity Chair:</b>	<b>Open</b>
<b>Engineer's week:</b>	William Ma
<b>Tech Societies Liaison</b>	<b>Open</b>
<b>Webmaster:</b>	Larry Winkler



## Mid-Hudson Section Website

<http://www.ewh.ieee.org/r1/mid-hudson/index.htm>



## Mid-Hudson Section General Contact

Baback Izadi [izadi@computer.org](mailto:izadi@computer.org) (845) 257-3823

# IEEE GOLD – Happy Hour

Come out and network with Graduates of the Last Decade

Limited amount of FREE appetizers so come early!

Please email if you will attend: Joseph Ervin - [forjoenow@hotmail.com](mailto:forjoenow@hotmail.com)

Time: Tuesday September 29 2009, 6pm-8pm

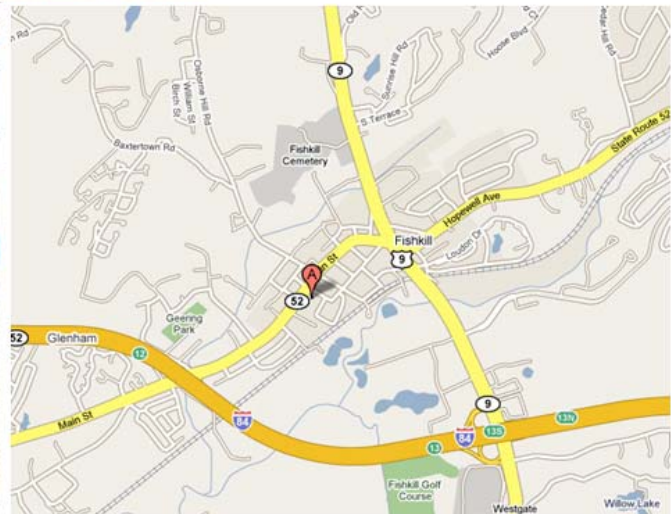
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[www.thekeltichouse.com](http://www.thekeltichouse.com)



**Computer Society** is looking for 200 testers to take the new CSDP beta examination and have put together a very aggressive \$295 package of e-learning, exam, SWEBOK Guide, and supplemental material for those that would like to participate. If interested, please email them at: [csdp@computer.org](mailto:csdp@computer.org). There is also a web page with the same information at: <http://www2.computer.org/portal/web/certification/csdpbeta>. This offer expires 16 October 2009.

**Awards:** Congratulations to two members of the Mid-Hudson Section who recently received IEEE Awards. **Dr. Barry Shoop** received the IEEE Educational Activities Board Meritorious Service Award for exemplary leadership and service to engineering education in the formation of the engineering programs at the National Military Academy of Afghanistan. **Mr. David J. Dittmann** received an IEEE Region 1 Award for exceptionally dedicated service as Treasurer of the IEEE Mid-Hudson section from 1993 to 2008 and for leadership and support of many other activities during that time.

# ***The West Point IEEE Student Branch and the Mid-Hudson IEEE Section Invite You to a Boat Cruise Social and Meeting***

Sponsored by:

**The West Point IEE Student Branch, Mid-Hudson Section of the IEEE and  
The Mid-Hudson Section Education Society**

**When:** Saturday, October 17, 2009, 11:45 AM – 4:00 PM, (RSVP NLT Oct 13)

**What:** Enjoy the fall colors in the Hudson Valley with a lunch time Cruise on the Hudson River followed by short presentations on topics in Engineering Education. IEEE section members and their families are welcome. Small children are not recommended.

**Itinerary:** 11:45-12:00 Meet at the South Dock, West Point. See <http://www.usma.edu/visiting.asp> for directions to West Point. Enter through the Thayer Gate and take the first right (Williams Road) down the hill to the dock.

12:00- 2:00 Enjoy lunch and fall colors on the Hudson River.

2:15- 3:45 Topics in Engineering Education, Department of Electrical Engineering and Computer Science.

**Purpose:** Meet IEEE student members from the West Point and SUNY- New Paltz sections and members from the Mid-Hudson and Berkshires IEEE sections. Lunch on the boat to include Deli Sandwiches and Pizza will be provided by the Mid-Hudson and Berkshire sections. Please come join us!

**Sign Up or Questions:** You must sign up before Oct 13 to participate in this event. Capacity is limited. Mid-Hudson section members may sign up for or may ask questions about the event via phone to 845-938-5565 or via email message to: [gkilby@ieee.org](mailto:gkilby@ieee.org)

**Topics in Engineering Education:** Following the boat cruise, there will be three short presentations on various topics in engineering education. Presentations will include tours of several labs in the Department of Electrical Engineering and Computer Science. Topics covered in the presentations include robotics in education, disruptive technology studies, and photonics.

**Senior IEEE Membership:** Do you have 10 years experience in a technical field? If so, it is likely that you qualify to become a senior member of the IEEE! Please indicate interest in your RSVP and plan to bring a resume to the event!!!!

# The IEEE Mid-Hudson Section Workshop on Cloud Computing

Sponsored by:

**The Mid-Hudson Section of the IEEE and  
The School of Science and Engineering, State University of New York, New Paltz  
Co-sponsored by the Mid-Hudson IEEE Computer Society**

**When:** Friday, November 3, 2009

**Where:** The **Terrace Restaurant**, SUNY New Paltz campus (all campus facilities are fully accessible and comply with the Americans with Disabilities Act).

**Registration Fee:** \$20 per person - free to Mid-Hudson IEEE members or students with valid ID (includes coffee breaks and buffet lunch, plus CD ROM with presentation materials and invited papers). Please contact the organizers for information on registration fee waivers due to economic hardship. Advance registration payments (checks drawn on a U.S. bank only) may be made out to the **CAS 8600**. Send check to: School of Science and Engineering, 1 Hawk Drive, State University of New York, New Paltz, NY 12561. Attendees may also register at the door on the day of the workshop.

## **Scope and Purpose:**

There has been a great deal of recent interest in new ways to deliver information technology (IT) resources to large organizations. This has been driven by significant reductions in the cost of computing cycles, mass storage, and network bandwidth, as well as a desire to pursue more federated data center designs, reduce operating expenses, and conserve energy. One significant emerging trend involves outsourcing selected business to IT service providers; the enabling technology and business model are both referred to as Cloud Computing. There has been a great deal of discussion around what cloud computing actually means to the IT industry, maturity of the enabling technologies, and training a new generation of IT staff. In this workshop, we've invited a number of distinguished speakers with first-hand experience in cloud computing to describe their work and share their vision for the future. The emphasis will be on development of cloud computing architectures, software, and networking for a range of practical applications, and on the viability of this approach for emerging data center designs. A panel discussion on current trends and directions in this field will also be included.

Attendees will have the opportunity to interact with the guest speakers through informal discussion breaks throughout the day, and a question/answer session will be held at the end of the panel discussion to assess those attendees wishing to apply for continuing education units under the New York State Professional Engineers program (there are no prerequisites for this workshop). Attendees will also have the opportunity to provide written feedback on the various sessions during the day. Invited papers and other presentation materials will be made available on CD as part of the registration package.

# Agenda

- 8:00 – 9:00 On-site registration and coffee
- 9:00 - 9:30 Welcome (Dr. Daniel Jelski, Dean, School of Science and Engineering, SUNY New Paltz; Dr. Baback Izadi, (2009 Chair, Mid-Hudson Section of the IEEE)  
Prior and future SUNY workshop topics (Dr. Casimer DeCusatis, IBM)
- 9:30 – 10:00 Dr. Casimer DeCusatis, IBM, and Todd Bundy, Adva Optical Networking, “Cloud Computing Fundamentals & Applications”
- 10:00 – 10:30 Michael Haley, IBM, “Emerging Cloud Data Centers”
- 10:30 – 11:30 Brian Goodman, IBM, “Building the compute cloud: firsthand experience”
- 11:30 – 12:30 Buffet Lunch, The Terrace Restaurant
- 12:30 – 1:00 Carolyn DeCusatis, Pace University, “Converged Networking for Cloud Data Centers”
- 1:00 – 1:30 Dr. Robert Cannistra, Marist College, “A new curriculum for cloud data centers”
- 1:30 – 2:00 Dr. Aparicio Carranza, City College of New York, and Jorge Martinez, EMC, “Migration of legacy storage area networks”
- 2:00 – 2:30 coffee break
- 2:30 – 3:00 Aneel Lakhani, IBM Global Services, “Cloud Computing showcase data center”
- 3:00 – 4:00 Panel Discussion, “The future of enterprise data centers: what will be the role of cloud computing ?” (all invited speakers)
- 4:00 – 4:15 Concluding Remarks (Dean, SUNY New Paltz)

## Continuing Education Units:

Attendees who register for this workshop are eligible for 0.7 Continuing Education Units (CEUs) under the New York State Professional Engineers License Program, for an additional fee payable either in advance or on the day of the workshop. The IEEE is an authorized CEU provider of the International Association for Continuing Education and Training, IACET provider # 1255

For more information, please contact Dean of Science and Engineering, SUNY New Paltz campus, (845) 257-3728 (litusg@engr.newpaltz.edu) or Dr. Casimer DeCusatis, IBM Corporation, 2455 South Road MS P343, Poughkeepsie, NY (845) 435-7232 (decusat@us.ibm.com).

Call for Abstracts  
IBM Semiconductor Technology Symposium

Sponsored by



**General Chair: Ravi Todi**

**Technical Program chair:  
Mukta Farooq**

**Technical Program Members:**  
**Circuits & Devices: Chidu Chidambarao**  
**Process Technology: Vince McGahay**  
**Reliability: Z. Jeffrey Yang**  
**Emerging Technology: Leland Chang**

**Publicity:**  
**Larry Clevenger; David Fried**

**Local Arrangements:**  
**Fernando Guarin; Wilfried Haensch**

**Important Dates**

**Conference date:**  
**December 3-4, 2009**  
**Abstract submission deadline:**  
**October 16<sup>th</sup>, 2009**  
**Author notification of acceptance:**  
**November 6<sup>th</sup>, 2009**

**Certificates will be given out in the following categories:**

**Best Poster Presentation**  
**Best Oral Presentation**  
**Most Innovative Presentation**  
**Best New Hire Presentation**

**Location: IBM T J Watson Research Center**  
**Date: December 3-4, 2009**

The IBM Semiconductor Process & Device Technical Communities of Interest, the IEEE Mid Hudson Section, the IEEE Electron Device Society, & EF TVC are hosting a 2 day technical exchange conference in Yorktown Heights, NY. This conference offers technical contributors from IBM and our research and development partners to be recognized for their achievements and a forum for technology exchange. The goal of the conference is to promote cross-functional and cross-divisional understanding.

**Participation in this conference is open to all IEEE members and non-members including IBM and all partner companies. Submissions should be clearly marked “IBM-Confidential” or “IBM/Partner Confidential” if the material has not been previously made public.**

The program for the first day will consist of 4 technical sessions, each containing 15-minute presentations with 5-minutes for Q & A. In addition, there will be an evening networking and poster session to provide a less formal venue for in-depth discussions with the authors. Refreshments will be served. The second day will consist of 2 sessions: first featuring invited speakers from academia and industry to discuss the present, past, and future of semiconductor technology; and second featuring executives from the SRDC Alliance partners.

Topics include:

**Circuits and Devices:** Novel MOS device structures, Circuit-Device Interaction, CMOS Scaling, High Performance, Low Power, Analog/RF Devices, Memory Devices, and 3D Systems

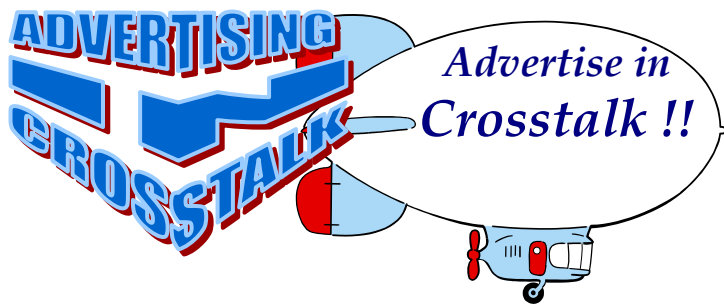
**Reliability and Characterization:** Manufacturing, Yield, Technology Reliability, Product Reliability, Chip-Packaging Interaction, Device and Yield Characterization

**Process Development and Integration:** Unit Process Development, Substrate Technologies, Lithography, High K/Metal Gate Development, Ultra-LowK BEOL Process and Advanced Packaging

**Emerging Technologies:** Novel Memory Elements, Advanced Devices, Carbon Nanotubes, Vertical Integration, Quantum Devices, Alternate Channel Technologies

**Submit One Page Abstract to Ravi Todi ([rmtodi@us.ibm.com](mailto:rmtodi@us.ibm.com))**

Questions on submitting abstracts or any other topic related to this conference can be directed to Ravi Todi ([rmtodi@us.ibm.com](mailto:rmtodi@us.ibm.com)); Mukta Farooq ([farooqm@us.ibm.com](mailto:farooqm@us.ibm.com))



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## **Are you an IEEE Senior Member?**

Becoming a Senior Member is not as difficult as you might think. According to the IEEE bylaws, "a candidate shall be an engineer, scientist, educator, technical executive or originator in IEEE-designated fields. The candidate shall have been in professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years."

More information on Senior Member Elevation:  
<http://www.ieee.org/organizations/rab/md/smforms.htm>