



New York Monitor

Advancing Technology for Humanity

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The challenging robots are lined up and ready to enter the Micromouse race at the R 1 Students' Conference held on 16 and 17 April at Central Connecticut State University, New Britain, Conn.

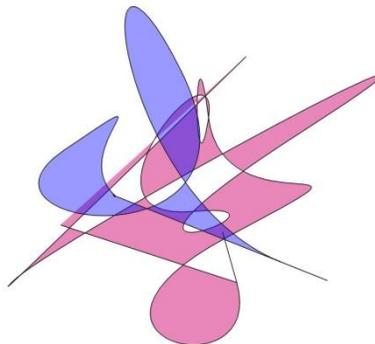
IEEE NY MONITOR

A PUBLICATION OF THE IEEE NEW YORK SECTION

EDITOR: AMITAVA DUTTA-ROY

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IEEE NY MONITOR, MAY 2016

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Contribute to the Monitor

QUICK DATE CHECKS FOR YOUR CALENDAR

Dates for the 2016 Executive Committee meetings at IEEE NY Section

~~10~~ January

~~10~~ February

~~9~~ March

~~13~~ April

11 May

8 June

No meetings during the months of July and August

14 September

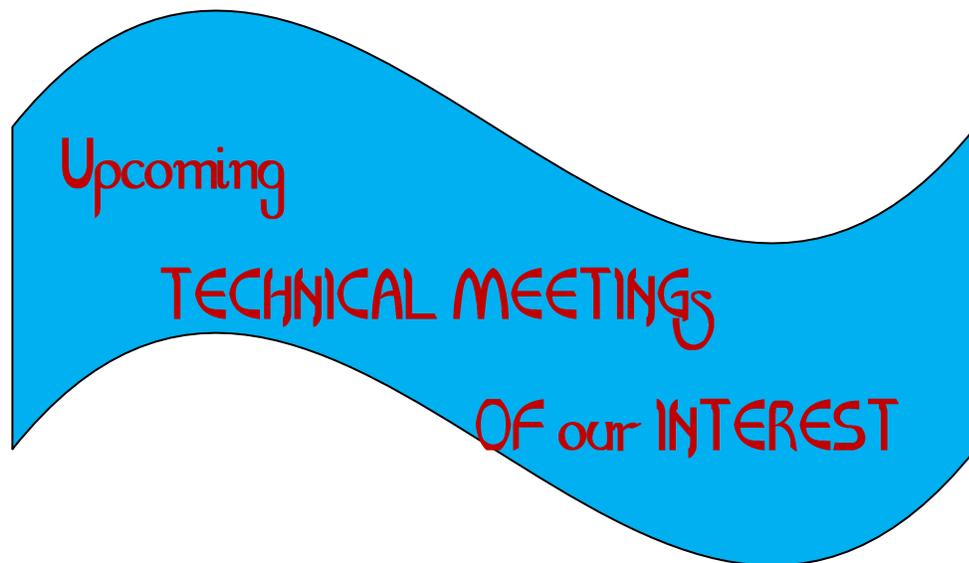
12 October

9 November

14 December

Unless otherwise notified all ExComm meetings are scheduled for 12:30 pm at the ConEd Building, 4 Irving Place, New York. All members of the New York Section are invited to participate in the ExComm meetings.

However, for reasons of security, to attend such meetings you must give advance notice to the Section chair.



Upcoming
TECHNICAL MEETINGS
OF our INTEREST

(For further details on each event please see the individual notices at the end of this posting)

- **24 May, Tuesday, 6.30pm**, Room 1S-F53 (entrance floor) at the New York Medical College Annex Building on Rt. 9A, 19 Skyline Drive, Hawthorne, NY 10532. IEEE Tappan Zee Subsection Joint Meeting with Westchester Chapters of ASME & SME Presents Intelligent Internet of Things (IIoT) by Dr. Shu-Ping Chang Manager, IBM System S Laboratory, IBM T.J. Watson Research Center, NY
- **24 May, Tuesday 28 April, Thursday, 5.00pm – 7.0pm**, ConEd Building, New York: PES/IAS/LMAG New York Chapters presentation: Fire Protection Systems —Clean Agents and Specialty Valves by Bryan Berkley, National Technical Representative, Viking Corporation
- **2 June, Thursday, 6.30pm-8.pm**, German House, 871 United Nations Plaza (First Avenue with 49th Street), a German Universities Alliance UA7, presentation: Urban Energy Systems: Challenges and Solutions for Zero-Carbon Cities Bridging the U.S. Skills Gap - A Transatlantic Discussion on Vocational Training and Best Practices
- **8 June, Wednesday, 7pm, EDT, free Webinar on Estimation on Consulting firms by** Kane McGladrey of the IEEE Vancouver Section



LOOKING FAR AHEAD

- 23 September, Long Island University, Brooklyn Campus: 2nd 2016 SPAC/iSTEP conference in New York. Details will be available in June edition of this newsletter
- **1-3 December, Thursday through Saturday:** Women in Engineering (WIE) Forum **on Inspiring and Empowering Women in Technology**, Boston, MA. For more information please write to 44griffin@comcast.net

FROM THE KEYBOARD OF THE EDITOR

For this month's Monitor we have not received the usual number of reports on the activities of our Section chapters or Affinity Groups realized since our last edition. Consequently, this issue of the NY Monitor is relatively thin. This is perhaps understandable when we realize that the activities are planned and manned by volunteers and they, at the first instance, have to devote time their professional work that brings in their livelihood. However, we encourage the organizers of events to submit write-ups to the Monitor. If we do not publish reports on our activities nobody would even know what we are up to. We need to be more visible in the world of technology and education. In your reports please be as complete as possible with all names checked and verified to be accurate. Please ask the speaker if we can publish his/her presentation. For copyright purposes we certainly need the speakers' permissions. Some will agree to have us publish their presentations and some won't. It is their prerogative and that is alright with us. Please take as many good quality pictures (png format preferred) and *please* add caption to each photo. Without such captions world's best photos become meaningless as engineering drawings or flow charts *sans* dimensions and legends. Submit your work by the 15th day of the month. Thank you.



Now, the most important event for our Section and for the Region 1 since the posting of our last edition was the 2016 IEEE Region 1 Students Conference held on 16 April last at Central Connecticut State University New Britain, Conn. Such Regional Student Conferences are held in geographical areas wherever the IEEE is present. The main purpose behind the conferences is to offer a platform for the student members of the IEEE for meeting industry professionals and the IEEE leaders. Only through such encounters the students see the benefits of working as engineers and of belonging to the IEEE.

One of the goals of the IEEE is to promote engineering education all over the world. This is a goal of many other associations and educational institutions as well. We need more engineers and scientists to save our world from any natural and man-made catastrophe. We need more engineers and mentors in STEM subjects to make our planet more habitable and pleasurable. The Massachusetts Institute of Technology (MIT) is one of those educational institutions that have programs to encourage young kids to learn computer programming. The MIT program is known as Scratch. It can be used for variety of purposes leading even to complicated simulations. View MIT's involvement in the Scratch programming for the kids at <https://scratch.mit.edu/about/>. (Pay attention to the video clip by Prof. Mitch Resnick of the MIT.) I must admit that I did not know that the program is adhered to by hundreds of schools all over the world. I realized it only when I visited Brazil last month. My good friend and the Region 9 representative to the PES Nelson Segoshi told me all about it and together we visited the Pioneiro school where he, as a volunteer in keeping with IEEE's true spirit, sits on the governing board of a school that participates in the Scratch program.

MIT declared 14 May 2016 as the World Scratch Day. It meant that hundreds of school children celebrated the day with their own programming. Read inside a short description about the implementation of the program in a São Paulo School.

Finally, do you remember that on 4 December 2015 our former Section chair Dr Shu-Ping Chang made an excellent presentation on Intelligent IoT at SMC NY Chapter? Now Dr Chang has made his slides available to all IEEE members. Thank you, Dr Chang.

A participant's account of the conference

Samir Iabbassen*

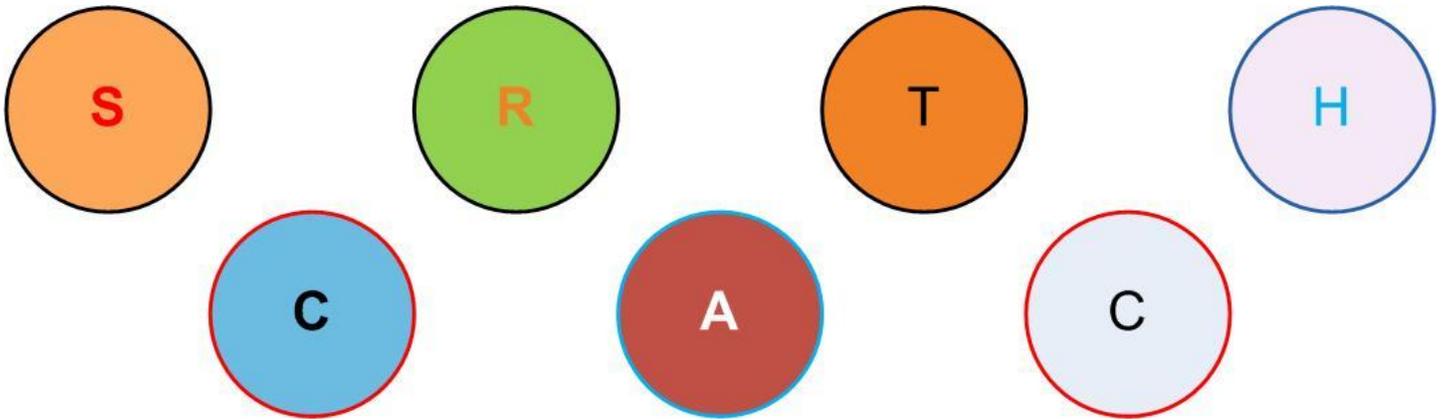
The IEEE Region 1 Student Conference was a successful event from all aspects: well-planned, organized as well as having a rich and diverse program.

After a fast registration process, we were directed toward the first event of the day, the famous Micro Mouse competition. The organization was superb and we assume that the judges had considerable difficulty in comparing and evaluate the high-level work presented by both professionals and newbies in robotics. The challenging robots exhibited amazing capabilities.

Plenary session was a rich introductions of what IEEE is and its organization and mission throughout different regions, the USA and around the globe. The IEEE-USA president spoke about the future of the IEEE and how to prepare future leaders to make it even more benefecial to the members and our surrounding communities. Generating hope in young members to be a part of this wonderful organization, he also briefly mentioned about the program for the 2016 Future Leaders Forum in New Orleans and encouraged all participants in the student conference to register and attend the event. (For a short slide show on the conference — though without captions – please visit <http://sites.ieee.org/ny-monitor/files/2016/06/2016-IEEE-Region-1-Student-Conference.pdf>)

* Samir Iabbassen is an IEEE Young Professional active at the SMC NY Chapter





Scratch is an educational and object-oriented programming language developed at Massachusetts Institute of Technology (MIT) mainly for teaching computer programming to children of eight years or more. This language makes it possible for the kids (and interested adults as well) to do animations, simulations, to create games and animated stories, and lets them share their work with others around the world via MIT's official Scratch site. The language is free of any monetary charges, open-source and easy to install. It is also compatible with Windows, Mac and Linux operating languages and may be downloaded directly from MIT. Various tutorials are available from <http://www.scratch.mit.com.edu> that facilitate the Scratch learning process.



Pioneiro school of São Paulo, Brazil is one of the pioneering institutions that adopted the Scratch program to encourage its students to learn computer programming when they are very young. The school was founded by the late Ms. Michie Akama, a Japanese immigrant in Brazil. Now many years later it is one of the best administered schools of São Paulo. It has a student population of 820 that attends classes

at all levels below that of a high school. Ms. Elaine Rocha, a senior teacher of the school traveled to MIT to learn first-hand the implementation of the Scratch program. She coordinates the Scratch efforts and is helped by her colleague Edson S. Moares. During my visit to the school on the World Scratch Day I had an interesting conversation with them about the impact of the program on young minds. I also had the pleasure of meeting with the director general of the school Ms. Irma Akamine Hiray. All of them are visibly enthusiastic and dedicated to the

program. Perhaps, one day volunteers from the IEEE South Brazil Section will lend a helping hand to popularize Scratch beyond the city limits of São Paulo. Technology has no geographical boundaries. (For the importance of STEM education and the IEEE's role in that I urge you to read the article by the IEEE president Dr Barry L Shoop in The Institute, Vol. 40, Issue 2, June 2016, p. 14.) The NY Monitor wishes them success! Photographs taken at the event may be seen at <http://sites.ieee.org/ny-monitor/files/2016/06/World-Scratch-Day-at-Escola-Pioneira.pdf>. — Amitava Dutta-Roy, Editor

Intelligent Internet Of Things (iIOT)

Shu-Ping Chang, Ph.D.
Software Development Manager
Cognitive Computing
IBM T.J. Watson Research Centre



Dr Shu-Ping Chang, the 2013 chair of the NY Section delivered a presentation on Intelligent Internet of Things (iIoT) at a meeting of the Section's SMC chapter on 4 December 2015. Dr Chang works at IBM Thomas Watson Research Center in Westchester, NY and has extensive experience of developing products and services that are broadly termed as IoT. In spite of his busy schedule he has offered the slides he used for the presentation online. Those slides are available at

https://www.dropbox.com/s/ve2qpegldv54dj8/20151204_iIOT.pdf?dl=0. We thank Dr Chang for sharing his slides with our member.



IEEE Tappan Zee Subsection Joint Meeting with Westchester Chapters of ASME & SME Presents

Intelligent Internet of Things (iloT)

By Dr. Shu-Ping Chang
Manager, IBM System S Laboratory
IBM T.J. Watson Research Center

Tuesday May 24, 2016 at 6:30 PM

All are invited – Please Post
CEUs/PDHs will be offered

Abstract: Internet has proliferated into all aspects of human life and all industries, mobile, social networks, cloud computing and Big Data/Analytic is forming the world now. Everything and everyone are connected to the internet in one way or the other. With data centric as the new economic, this Internet of Things (IOT) brings more challenges to the technologies, industries and human society as a whole. In this dynamics, we will look into the ecosystem of the new era, the nature of the data and introduce to the audience many new markets of the brave new world that affects industries such as Healthcare, Telecom, Transportation, Retail, etc. and even your daily life. Though no one can predict the future, or reality, this talk will provide a peek into the time to come and challenge the audience to have new viewpoints in the intelligent IOT era. The future is here, it has just not distributed evenly. Where are you?



Bio: Dr. Shu-Ping Chang (張書平) works at Cognitive Computing, IBM T.J. Watson Research Center as a software development manager for the IBM System S (Streams) Laboratory, a cluster for distributed computing research & development with 600+ physical nodes and 3000+ CPU cores. IBM System S project, the base of IBM Big Data product IBM Streams, uses streams processing architecture for massive information computing and management as decision making support. His primary function is System S Laboratory management, prototype systems development and cluster system administration automation especially in faults management. Dr. Chang has more than 25 years research and product development experiences in the Computer and Information technology arena. He has broad and in depth knowledge in computer system hardware architecture and software structure in Big Data platform, prototype research & development, computer communication, relational database, internet based solutions and cloud computing.

Location: Seminar will be held in **Room 1S-F53** (entrance floor) at the New York Medical College **Annex Building on Rt. 9A, 19 Skyline Drive**, Hawthorne, NY 10532. **Directions: From Route 9A North** – Make right turn on to the south end of Skyline Dr. At the sign for 19 Skyline Dr. turn right and park **behind** the large trapezoidal building. Enter the **back** center of the building at the base of the large blue pole at the back. Security staff at the entrance will let you in. If there is no Security Guard at desk push intercom button in entrance hallway to talk to Security.

Registration: Required and requested by close of business on Monday May 24, 2016 at:
<https://meetings.vtools.ieee.org/m/39860> See Tappan Zee Subsection website event page at
http://www.ewh.ieee.org/r1/new_york/tz/ for more details.

Refreshments: Refreshments will be offered at 6:30 PM, presentation starts at 7:00 PM.

Seminar Coordinator: Robert M. Pellegrino, Chair, IEEE Tappan Zee Subsection



**POWER & ENERGY SOCIETY
INDUSTRY APPLICATIONS SOCIETY
LIFE MEMBERS AFFINITY GROUP
NEW YORK SECTION**



You are invited to a meeting of the PES & IAS NY Chapter and the NY LMAG on:

Fire Protection Systems – Clean Agents & Specialty Valves

Tuesday, May 24th, 2016

THE PRESENTATION:

This presentation will review the type of pre-action systems available. Once the review of the pre-action system is completed, we will spend time on several different types of specialty fire protection valves related to pre-action systems. We will discuss when, where and how they work. The different systems will be Surefire, Firecycle and Flow control on-off systems. We will go into detail on when and why we should add clean agent to cover different items inside a building or room. Novec 1230 and FM 200 will be discussed as different types of clean agents. With each system we will also go over code changes as well.

THE SPEAKER: Bryan Berkley, National Technical Representative, Viking Corporation



Bryan has been involved for the last 20 years in all aspects of fire protection inspection, installation, design and manufacturing and applications. He is certified NICET Level IV in water based systems, Level II in special hazards and Level II in inspection & testing. He was also a system designer and has been a design manager in the designing of water based fire protection systems, foam systems, and clean agent systems. Over the past 4 years he has been a national technical representative for Viking, covering the North East. He has conducted fire sprinkler and clean agent seminars for SFPE (Society of Fire Protection Engineers) and ASPE (American Society of Plumbing Engineers). Currently he is involved with airports, stadiums, hospitals and other major high profile projects on

the national and international level.

<p>ALL ARE INVITED – PLEASE POST</p>	<p>When: 5:00 pm — Starts-Refreshments & Program 7:00 pm — Program Ends</p> <p>Where: Con Edison Edison Room, 19th Floor 4 Irving Place, New York, NY 10003 Nearest Subway: 14th St/Union Sq.</p>
<p>RSVP: https://meetings.vtools.ieee.org/m/39823 Chair Programs: Arnold Wong wongar@coned.com or (212) 460-4189 Chair Technical Committee: Sukumar Alampur salampur100@hotmail.com or (917) 522-2844</p>	
<p>FOR SECURITY REASONS: NO WALK-INS!</p>	

This program will be awarded IEEE Continuing Education Units.

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.



The German Center for Research and Innovation and the German Research Foundation cordially invite you to
a panel discussion on

**Urban Energy Systems:
Challenges and Solutions for Zero-Carbon Cities
Thursday, June 2, 2016: from 6:30 p.m. to 8:30 p.m.**

Panelists:

Prof. Dr. Ursula Eicker

Professor, Centre for Sustainable Energy Technology
HFT Stuttgart University of Applied Sciences

Michael Bobker

Director of the Building Performance Lab CUNY,
Senior Fellow at the CUNY Institute for Urban Systems

Prof. Charles Vörösmarty

Professor, Department of Civil Engineering; Director,
CUNY Environmental CrossRoads Initiative City University of New York (CUNY)

Prof. Dr. Volker Coors

Professor, Competence Centre Geodesy and Geoinformatics
HFT Stuttgart University of Applied Sciences

Moderator

Dr. Kurt Becker

Vice Dean for Research, Innovation, and Entrepreneurship,
Professor in the Dept. of Mechanical and Aerospace Engineering and in the Dept. of Applied Physics
NYU Tandon School of Engineering

German House, 871 United Nations Plaza (First Ave. at 49th Street), New York, NY

RSVP by May 31 by clicking [here](#). Registration is required to attend. Seating is limited.

Reception after the meeting.

A note from MARTY IZAAK, NY Section IEEE Consultants Network Chair

On Wednesday, June 8, at 7 PM EDT Kane McGladrey from the Vancouver Section will host a free webinar about estimation at consulting firms and all IEEE members are invited to participate.

Estimation is an essential but often misunderstood skill for the success of all consultants. Here are the best practices attendees will learn for estimation of professional services engagements:

- Trust, accurate reporting, and math are prerequisites for good estimation
- How Monte Carlo simulations can produce reliable estimates for fixed deliverable packages
- Why historical estimation bias can help with new or difficult estimates

Link for more information: <http://www.kaynemcgladrey.com/events/2016-6-webinar-estimates>

Registration link: <https://tcok4qcvwf.wb.getresponse.com/933861587/register>

Participants will need to register with a valid email address to attend. I'd also suggest they have a copy of Microsoft Excel installed on their Mac or PC because we'll be looking at how to use Excel for Monte Carlo and historical bias simulations.

Please share this with others, and let me know if you or others will participate.
Thanks.

MARTY IZAAK
NY Section IEEE Consultants network Chair

martyfmi@aol.com

WOMEN IN ENGINEERING

IEEE WIE FORUM ON
INSPIRING AND EMPOWERING WOMEN IN TECHNOLOGY



1 - 3 DECEMBER 2016
BOSTON, MA



Call for papers open - See website for more information
SITES.IEEE.ORG/WIE-SUMMIT-USA-EAST

SAVE THE DATE



ADVERTISING IN THE NY MONITOR

The IEEE NY Monitor is published online monthly excepting in July and August. The target reader are IEEE members (more than 4,000) who reside in New York City and vicinity. It is also download by many of the 30,000+ members of the IEEE Region 1 that covers 22 Sections of the IEEE in the entire northeastern United States.

Advertisement rates per insertion	
Business card	\$80
Quarter page	\$150
Half page	\$200
Full page	\$250

Please submit camera-ready jpg images. For further information about advertisements in the NY Monitor please contact a.dutta-roy@ieee.org. Thank you!

THIS IS THE END OF THIS MONTH'S NY MONITOR

Thank you for reading!