



ION Saint Louis

SPRING 2012



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Chair: Jessica du Maine
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Past Chair: Bob Becnel, P.E
Email: bob@becnel.com

Vice-Chair: Dinesh Hiripitiyage
Email: dinesh_h@hotmail.com

Treasurer: Dr. Paul Min, WUSTL
Email: psm@seas.wustl.edu

Co-Treasurer: Bob Becnel, P.E
Email: bob@becnel.com

Secretary: Prakash Shahi
Email: Prakash.shahi@nidec-motor.com

From the editor:

This year, the Section website is on the move to a new entity web hosting service using Wordpress. Wordpress is currently the most popular content management system in use. Unlike HTML, Wordpress allows the website to be updated with new themes without altering the content itself. Wordpress features also include blogging tools as well as plugins and widgets that make the developers' job easier to add functionalities, such a slideshow, to improve the look and use of the website.

Please visit our new site at <http://sites.ieee.org/stlouis/home/>

As always, please keep sending me your articles of any planned and post events, yours and other IEEE colleagues achievements, and any other interesting bits of information for the next newsletter.

Prakash B Shahi, Nidec Motor Corporation

Chair’s Column: Year for Volunteerism!

Saint Louis Section of IEEE
Chair’s Column, Mar 2012



The IEEE Saint Louis Section is off to a good start- this being the “Year for Volunteerism”!

St. Louis Section Executive Committee held our first planning meeting for this year on February 23rd at Florissant Valley Community College. This year, we would like to focus on the idea of volunteerism, a key element to the health and progress of any organization, such as ours. Among the ideas presented and discussed were our possible involvements in “Engineering World Health” (www.ewh.org) as well as our own local Gateway professional chapter of “Engineers Without Borders” (www.ewb-stl.org).

As in previous years, we will continue supporting the student branches in their involvements in IEEE competitions and also in promoting volunteerism.

There is also interest in our Section to start a Robotics and Automation Society Chapter. Robert Sealy is looking for interested members- please be on the look out for email regarding this issue.

I look forward to this “Year of Volunteerism” and hope that the activities planned will not only be attractive to the membership in general but also allow us to use our Electrical Engineering skills for a greater good.

Our next meeting will be on May 3rd 2012 at Florissant Valley Community College. I hope to see you all at that time.

Jessica Du’Maine, Jessica.du.Maine@gmail.com

SECTION NEWS

Request to form a Robotics and Automation Chapter

There is an interest in the Section to form a Robotics and Automation Chapter. Robert Sealy is spearheading an effort to get all interested members to come together to form this new chapter in St. Louis. He has some very interesting ideas on how this new Chapter can be both useful to the Section and its members as well as to the community. Some of his ideas include conducting free robotics introduction workshop as well as setting up a robot at the St. Louis Science Center for public viewing. Robert is involved in robotics and works at Bastian Solutions in Maryland Heights.

All interested members, please contact Robert Sealy at rj_sealy@yahoo.com

How to form your own new Society Chapter?

There are 38 IEEE Technical Societies. A chapter is the technical subunit of one or more IEEE Sections. Society Chapters can consist of members from one or more IEEE Societies who share technical interest and geographical proximity. Chapter activities may include guest speakers, workshops and seminars as well as social functions. Chapters are a great way to get involved at a local level with a community of like-minded people of similar interests to further your own, the Society's, the Section, and the IEEE growth and goals.

Members interested in forming their own new chapters can visit the IEEE website <http://www.ieee.org/portal/pages/tab/cha/newchap.html> for more information.

To form a new Society Chapter you will need:

- 12 Society Members to sign the New Chapter petition
- Approval of the Petition by the local Section Executive Committee
- Approval from Member and Geographic Activities Board which is granted if the Society President(s) and the Regional Director have no objections

Section News

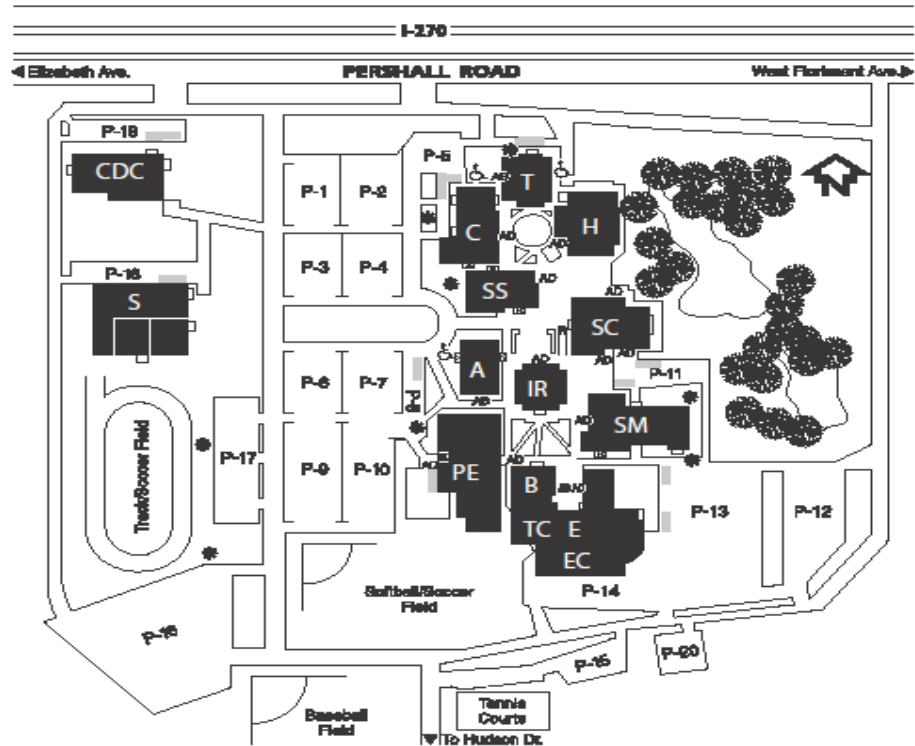
Section Meeting: Planning

Our first Executive Planning meeting was held in the Engineering Building of Florissant Valley Community College on February 23rd. The new Chair, Jessica Du'Maine presented the Chair's report— she shared her vision to increase volunteerism as a chapter. Some of the possible organizations that we could be involved are Engineers Without Borders, Engineering World Health and IEEE student competitions.

In the meeting, budget for this year was also presented by Bob Becnel. As a co-Treasurer, he will be assisting Dr. Paul Min (Treasurer) with the day to day activities. Bob is also our immediate past Chair.



FLORISSANT VALLEY CAMPUS
 3400 Pershall Rd.
 Ferguson, MO 63135
 Phone: 314-513-4200



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|----|-----------------------|-----|--------------------------|----|-------------------------|
| AD | Autism/Deaf | A | Administration | IR | Instructional Resources |
| □ | Non-Accessible Door | B | Business | PE | Physical Education |
| ⊠ | Non-Accessible Door | CDC | Child Development Center | S | Service Building |
| ⊞ | Non-Accessible Door | C | Communications | SM | Science/Mathematics |
| ⊞ | Ramp | EC | Emerson Center | SS | Social Sciences |
| ⊞ | Ramp Accessible Route | E | Engineering | SC | Student Center |
| ⊞ | Accessible Parking | H | Humanities | T | Theatre |
| ⊞ | Emergency Phase | TC | Training Center | | |
| ⊞ | Elevator (PE) | | | | |

Section Announcement

Call for nomination for 2013 IEEE St. Louis Section Officer: Section Secretary

In keeping with the tradition of alternating between the academia and the industry, St. Louis Section is seeking nominations, this year, from our members in the academia, for the position of 2013 Section Secretary. St. Louis Section Secretary is a progressive position that will move up annually in to the positions of Treasurer, Vice- Chair and, Chair respectively.

Please note that the strength of our Section as well as the entire IEEE organization depends upon its volunteers willing to sacrifice their time in order to carry out the organizations goals. The volunteers get a chance to work with people from one's field of academic and career interest to pursue the goals of promoting IEEE, as well as the St. Louis Section and its valued members.

Any interested current members from the academia are requested to submit their brief biography by June 1st to **Bob Becnel** (Bob@becnel.com)

Section Secretary Duties

Principle responsibility of a Section Executive Committee member is to oversee the management of the Section, and in doing so, serve the best interest of the IEEE, its members and the public. As the Section Secretary, you are a key member of the Section Executive Committee.

Section Secretary acts as a gateway between Section members and IEEE, having a leadership role in bringing members' needs to the Executive Committee (ExCom). Part of the role involves having accountability and ownership of Section records, reporting officer changes, and submitting reports to IEEE Member and Geographic Activities (MGA).

Besides the duties of record-keeping for the Section, the St. Louis Section Secretary is also the newsletter editor and the webmaster.

Announcements

IEEE Lecture Series 2012: Non-Linear Filters and Particle Flow

Presenter: Dr. Fred Daum

Date: April 9 2012

Where: Boeing Bldg 100 Briefing Center– Meet in Lobby

Time: 5 PM to 6 PM

Total Seating Capacity: 45 Attendees

Fred Daum is an IEEE Fellow, a senior principal Fellow at Raytheon, a Distinguished Lecturer for the IEEE and a graduate of Harvard University. Fred was awarded the Tom Phillips prize for technical excellence, in recognition of his ability to make complex radar systems work in the real world. He developed, analyzed and tested the real time algorithms for essentially all the large long range phased array radars built by the USA in the last four decades, including: Cobra Dane, PAVE PAWS, Cobra Judy, BMEWS, THAAD, ROTH, UEWR, and SBX, as well as several shipboard fire control systems and air traffic control systems. These real time algorithms include: extended Kalman filters, radar waveform scheduling, Bayesian discrimination, data association, discrimination of satellites from missiles, calibration of tropospheric and ionospheric refraction, and target object mapping. Fred's exact fixed finite dimensional nonlinear filter theory generalizes the Kalman and Beneš filters.

He has published nearly one hundred technical papers, and he has given invited lectures at MIT, Harvard, Yale, Caltech, the Technion, Brown, Georgia Tech., Univ. of Connecticut, Univ. of Minnesota, Melbourne Univ., Univ. of New South Wales, Univ. of Canterbury, Univ. of Illinois at Chicago, Washington Univ. at St Louis, McMaster Univ., Boston Univ. and Northeastern University.

Note: This is a secure Boeing facility. All non-Boeing attendees must submit to Jim Leonard (james.v.leonard@boeing.com) via email their name, country of citizenship and home organization not later than 2 April 2012 for escort required badges for entry.



REGISTRATION IS NOW OPEN FOR THE ELECTRONICS, ELECTRICAL, ENGINEERING & MANUFACTURING SHOW, 2012

Register @ <http://www.erastl.org/registration.asp>

Wednesday, April 4th, 2012

****9:00a.m. – 5:00p.m.****

Saint Charles Convention Center

One Convention Center Plaza, St. Charles, MO 63303

BROUGHT TO YOU BY THE SPIRIT OF ST. LOUIS CHAPTER, E.R.A

Plan on Attending.....over 75 Booths

Comprehensive display of electrical and electronic manufacturers and distributors in the areas of: Communications, RF/Microwave, Instrumentation, Manufacturing Equipment, Cooling Systems, Computer Peripherals, Packaging Equipment, Commercial and Military Grade Electronics and Subsystems, Voice and Data Systems, Security, Video Systems and much more.

-ATTENDANCE PRIZES include 4 KINDLE FIRES to be raffled off along with various event tickets-

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Contact us at attendee@erastl.org with any questions.

**2012 SPRING MISSOURI CONFERENCE WORKSHOP
25th ANNUAL MOCON**

PDHs and CEUs awarded. Visit <http://www.moconstl.com> for maps and more!

WEDNESDAY, 28 March 2012

Electrical OverCurrent Protection (day 1 of 2 days) by Mr. Paul Friemel, PE (Bussmann)
Systems Engineering Workshop (1 day) by Lou Pape & Dale Waldo (UMSL)

Thursday, 29 March 2012

Blue Tooth Fundamentals (1 Day) by Bill K. Drake (UMSL)
Arc Flash Analysis (1/2 Day) by Mr. Edwin Scherry (UMSL)
Graphical Processing Units (1day) by Ramesh Agarwal (UMSL)
Advanced Electrical OverCurrent Protection (day 2 of 2 days) by Mr. Paul Friemel, PE(Bussmann)

Friday, 30 March 2012

National Electrical Code 2012 Update by Michael W. Smith (UMSL)

UMSL = Univ. of MO at St. Louis Campus, Bussmann = Bussmann HQ, STL County

Advanced registration for the 2012 Spring Missouri Conference (MoCon) Workshop is now open. Advanced registration fees are \$550.00 for a full day tutorial and \$275 for a 1/2 day tutorial. Advanced registration will close on Friday, March 17, 2012. After that, the fees will be \$600 for a full day tutorial and the fees for a 1/2 day tutorial will be \$300.00.

IEEE Student Members and Retirees pay 25% Fees. Non-IEEE Students pay 50% Fees.

You may use this form to register or you may register online at the MoCon Workshop web site: www.moconstl.com. Classes start at 8:30 am and end at 5:30 pm. Lunch is provided 12:30-1:30 pm. Lunch is also provided for those taking two 1/2 day tutorials on the same day.

IEEE Members receive a 20% discount.

Name _____ Tutorial # _____ Amt Enclosed\$ _____
Address _____ City/State/Zip _____
Email address _____ Tel No. _____ IEEE Member # _____
Remit check or purchase order payable to "2012 Spring MoCon" (CREDIT CARDS VIA PAY PAL)

MAIL TO: JERRY HERMAN, MOCON TREASURER
2112 McGregor Circle
Dardenne Prairie, MO 63368,

FOR COPIES OF THIS FORM, CONTACT

MR. BOB MENZEL 314-545-6712

IEEE Announcement

2012 IEEE REGION 5 AWARDS CALL for NOMINATIONS

IEEE Region 5 is accepting nominations for the following awards.

- #001 Outstanding Large Section (>500 members)
- #002 Outstanding Small Section (=500 members)
- #003 Outstanding Member
- #004 Outstanding Educator
- #005 Outstanding Large Student Branch (>50 members)
- #006 Outstanding Small Student Branch (=50 members)
- #007 Outstanding Student
- #008 Outstanding Student Branch Counselor
- #009 Outstanding Large Company (>500 employees) #010 Outstanding Small Company (=500 employees)
- #012 Outstanding GOLD Member
- #013 Outstanding Individual Achievement Award (up to 5 awards)

A short description of each award and nomination forms can be obtained from the Region 5 Website (<http://ewh.ieee.org/reg/5/>). Only the pages pertaining to a particular award need to be submitted.

Please send nominations to the IEEE Region 5 Awards & Recognition Committee Chair, Mehrube “Ruby” Mehrubeoglu, ruby.mehrubeoglu@ieee.org.

The deadline for nominations is February 28, 2012.

Questions can be addressed to the IEEE R5 Awards & Recognition Committee Chair.

Ruby Mehrubeoglu
361-815-8416/361-825-3378
ruby.mehrubeoglu@ieee.org

IEEE Member Benefits

EBook Classics for IEEE Members

[18 new titles](#) were added for the 2011 membership year. IEEE members now have access to more than 240 eBooks from the IEEE Press collection through IEEE *Xplore*, at no additional cost.

The eBook collection spans a number of today's technologies across 15 different content areas, and includes:

- practical handbooks,
- introductory and advanced texts,
- reference works, and
- professional books.

Newer eBooks will be added every year.

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1. Log in to [IEEE Xplore](#) using your IEEE Member Web account.
2. Under the "Browse" heading in the left-hand navigation, click on "Books".
3. Select the "Classics" tab from the top of the page. Under this tab you will find a listing of all the free titles.

-- or --

1. Log in to [IEEE Xplore](#) using your IEEE Member Web account.
2. Under the "Browse" heading in the left-hand navigation, click on "Books".
3. On this page, you can browse alphabetically by book title, or if you prefer, browse by keyword, such as "software".
4. If the title is included in the IEEE eBook Classics, you will see an orange "FREE" icon to the right of the book's title, and individual chapters will have live links.

IEEE memberNet– The IEEE Member Directory Online

IEEE memberNet is an online search and networking tool that allows members to connect with technical and engineering experts worldwide. This tool can be utilized by members seeking peers who share a common technical interest, membership, or affinity.

- Exclusive benefit of IEEE membership, at no additional cost.
- Only online directory that connects all IEEE members.
- Enables networking by technical and geographic affiliations, affinities, and more.
- Flexible search building tool using multiple criteria.
- 'myNetworks' personalization to each member's technical interests and involvement with IEEE.

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