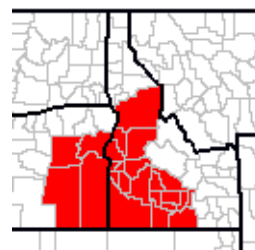




IEEE Boise Section Newsletter September 2011



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Upcoming Events

October 25th – Boise Computer Society Banquet

Time: 6:00 – 9:00pm

Location: BSU Student Union, Bishop Barnwell room

URL: <http://www.ewh.ieee.org/r6/boise/computer/>

Topic: “How to Start a Wireless Company in Boise, ID”

Guest Speaker: Pat Sewall

Pat Sewall, CEO and founder of local company CradlePoint, Inc. has graciously offered to give a talk for the Boise Computer Society Banquet. CradlePoint Technology is the global leader in a market that is seeing exponential growth - Mobile Broadband Networking. We liked his suggested topics so much we asked him to speak on all of them from the technical aspects of mobile telecommunications to the business challenges of hi-tech entrepreneurship. Stay tuned for the date which we are finalizing now hopefully the last week of October. –Denise Korman

February, 2012 – Boise Section Engineer’s Week Banquet

Time: Week of Feb. 19-25, 2012

Location: BSU Student Union

URL: TBD

The IEEE Boise Section will be holding its Annual Banquet the week of Feb. 19-25, 2012 in honor of National Engineers Week (see www.eweek.org). The 2012 Banquet speaker will be Dean Klein, VP of Memory System Development at Micron Technology in Boise. The Section is looking for volunteers to serve on the Banquet Committee as well as someone to act as Chair of the Committee. Serving on the Banquet Committee is a marvelous opportunity to network with other Boise-area professionals. If you are interested in chairing or participating in the Committee, please contact Chris Gunning at cgunning@ieee.org.

Announcements

IEEE Boise Section 2012 Officer Elections

By Chris Gunning

IEEE Boise Section Officer Elections will be held in November. If you are interested in becoming an officer of the IEEE Boise Section, please contact any member of the Elections Candidate Search Committee. The Search Committee consists of an unbiased group of IEEE Boise Section members who are not running for officer positions. The Boise Section officer positions described below are all available for nominations within the Boise Section.

Boise Section Elections Candidate Search Committee:

Chris Gunning cgunning@ieee.org
Elisa Barney Smith EBarneySmith@boisestate.edu

Chair:

The Section Chair is the Chief Operating Officer of the Section and is responsible for ensuring that the Section (including Section Technical Chapters and Section Affinity Groups) are fulfilling the Section Mission and Goals.

Vice Chair:

The Section Vice-Chair assists the Section Chair in managing the operations of the Section in the best interest of the local members and provides leadership, guidance and a sense of purpose for other Section volunteers.

Secretary:

The Section Secretary acts as the gateway between Section members and IEEE Officers and takes ownership of Section records and correspondence.

Treasurer:

The Treasurer works with the Section Leadership in developing a budget and monitoring adherence to it, while keeping Treasurer's records and financial data up-to-date.

All officers shall be elected annually by the Section membership. The term of office for all officers shall normally be one year, but may continue until a successor has been duly elected and takes office. The term of office will date from 1 January through 31 December. The consecutive period of service in any one office shall normally not exceed two years. Such exceptions require approval by the Region Director who will annually report such exceptions to the MGA Board. An individual may be re-elected to a position previously held provided at least one year has passed since he or she held that office. (Source MGA Operations Manual -9.4.F.7)

Other Volunteer Positions: (Please contact the Elections Committee if you are interested)

Membership Chair:

Manages section membership database and promotes membership retention and recruiting.

PACE (Professional Activities Committees for Engineers) Chair:

Promotes the professional status of the electrical engineering profession and of IEEE membership and provides a mechanism for communication of members' views on their professional needs.

Newsletter Editor:

Compiles and publishes articles for the Boise Section Newsletter.

GOLD (Graduates of the Last Decade):

Maintain communication with members that graduated within the last decade by providing events and activities that are valuable to this unique subset of IEEE Section members.

Webmaster:

Maintain and host the Boise Section Website, while catering to the needs of the IEEE Boise Section and Boise Section Chapters.

Banquet Committee Chair:

Lead organization of the annual Section Engineer's Week Banquet including venue reservations, speaker selection and event advertising.

Volunteers to schedule speakers and other technical events are always needed, so if you would like to get involved, even a few hours a year, please let us know.

Women in Engineering Chair for IEEE Region 6 NE Area

By Kristen Hopper

IEEE Women in Engineering (WIE) is seeking a Chair for the IEEE Region 6 Northeast (NE) Area. The position involves communicating with either WIE representatives or Section Chairs who do not have a WIE person at the Section level in the Region 6 NE Area as well as participating in teleconferences and scheduled meetings with the Region committee. The role may involve attending the Area fall and spring meetings if the Area can budget for the travel. If you or someone you know might be interested in this position, please contact the IEEE Region 6 Women in Engineering Chair:

Nirupama(Niru) Prakash Kumar
Power Systems Engineer, EED, Pacific Northwest National Laboratory
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Section News

Boise Section Members Attend IEEE Sections Congress

By Joe Rekiere and Sean Collison

The weekend of August 20th, five members of the Boise Section attended the IEEE Sections Congress: Elisa Barney Smith, Region 6 Northeast area chair, Joe Rekiere, PACE chair, Sean Collison, GOLD chair and BSU engineering students Aaron Brown and Nick Luong. The IEEE Sections Congress is the triennial meeting of IEEE section leaders from around the world. This year it was held in San Francisco, California at the Hotel Marriot in downtown San Francisco – a good choice with its large meeting rooms and great service for the 1200 plus attendees. Besides a trip to San Francisco with its wonderful accommodations, great food and opportunities to meet fellow IEEE volunteer leaders from around the world, the Sections Congress serves a purpose.

The Sections Congress theme this year was about “Empowering members to create the future”. The theme is carried out by offering three opportunities (goals) for the attendees. The attendees have an opportunity to attend training, build leadership skills and exchange ideas to bring back to their sections. The attendees also have many opportunities to network with other volunteer leaders throughout IEEE. And finally, the attendees who are section delegates vote on recommendations. A delegate from every section of the IEEE serves as the voice of the collective membership from their section. The delegate has the opportunity to discuss and vote on recommendations that will impact the development and growth of the IEEE for all the members it serves. Joe Rekiere filled that role for the Boise Section. The Sections Congress is an impressive event with many opportunities for the attendees. So what was it like and what was learned?

One of the first impressions in attending the Section Congress is the sheer size and breadth of the IEEE. Both in its number of members from all over the world and the many programs it offers to help engineers to prosper. As the current IEEE president, Moshe Kam, noted in his keynote, the IEEE is like a large elephant that has many important parts that keep it moving and alive,

but these parts are not all seen at once when standing up close. The whole of IEEE serves many purposes that help engineers to prosper in their careers so they can better serve humanity. To include all that the IEEE has to offer for engineers would be too much for this article. To include all that was covered at the Sections Congress is also too much for this article. Instead here are some highlights of what we learned while attending:

- One way to help with section vitality is to have volunteers work with their section chair to develop their own job description and expectations with a follow up at the end of the year with a self-assessment.
- Keep a published list of needs to be filled by volunteers.
- To help run a successful Maker Faire, consider teaming up with an already scheduled event that draws in lots of participants, like an art fair.
- Look to create affinity groups within a section to improve membership, for example, Women in Engineering.
- Solicit input from the student and GOLD members on how best to use social media for the section. They are the most active users and leaders in social media.
- Appoint a local vTools expert for the section.
- Go beyond technical talks and create events that encourage networking among section members.
- Take time to reach out to new members with personalized attention. Take time to introduce yourself. Follow up at the end of the year to get their feedback.
- There was sobering news for the IEEE in the United States as membership has been declining 1% year over year for the past decade, even though it has been increasing worldwide to its present size of 400,000 plus members.
- IEEE spends more on its members than what it brings in from membership dues, with the additional membership funds coming from publication and conference revenue.
- The IEEE adopted NetSuite for financial reporting and will be coming out this fall. This is an online financial suite similar to QuickBooks which will be used for section budgeting and L50 reporting.
- There were 35 exhibits which show cased the services offered by the IEEE staff to help with meetings, conferences, publications, vTools, volunteer resources and affinity groups. All of these are found on the iee.org web site.

In addition to attending breakout sessions, keynotes, area meetings, poster displays, exhibits and learning labs, we took some time to have fun. On Sunday night, we visited the Computer History museum in Mountain View. This is an impressive museum with calculating machinery that ranges from ancient times up to modern times. It includes a replica of Babbage's difference engine and original electronic/digital equipment for super computers, personal computers, computer gaming systems and also current devices like the iPhone 4. The computer museum was an informative and worthwhile visit and so was attending the sections congress.

To learn more about the sections congress and the top five recommendations that will take us into the future, visit: http://www.ieee.org/societies_communities/geo_activities/sections_congress/2011/index.html.

K-12 Outreach Using Snap Circuits Electronic Device Teaching Kits

By Shyam Surthi

The Electron Devices Society has set aside funds to offer a limited number of Snap Circuits kits (<http://www.elenco.com/snapcircuits.html>) to our chapters free of charge. The goal of the program is to enable chapters to host events designed to engage middle to high school level students in electrical engineering. By utilizing these easy to use and fun kits, we hope to encourage them to consider electrical and electronic engineering as a career. This versatile tool, along with your enthusiasm and expertise, can be used to demonstrate the exciting, creative possibilities in the electron devices field.

Dr. Stephen Parke and his team at Northwest Nazarene University (NNU) have obtained some of the trial kits. The first trial opportunity was with NNU's freshman engineering students in the required Intro to Engineering lab course in December 2010. This course involves students with vastly different levels of previous exposure to electronics...all the way from expert hobbyists and graduates of pre-Engineering "Project Lead the Way" high schools to students who have never taken any physics or technology courses in high school at all and have never touched an electrical or electronic circuit. The bigger 350R kits were used over a two-week period in a self-directed approach with teams of 3 students to "level the playing field" and bring the entire freshman class to the same level of electronic circuit literacy. The team's second opportunity was with a local Boy Scout troop in January 2011, who needed to earn their Electricity badge. In this case we effectively used the smaller 150R kits to teach them the basics of electrical circuits, but did not dive into electronics.

The most significant opportunity for Dr. Parke's team was using the NNU Engineering students to teach in their own electronics lab as an outreach field trip with about one hundred 5th graders from the most underprivileged/highest minority population school

in Nampa, Idaho. The event took place in May 2011 and was very successful in getting students interested in engineering. In June, his team included the Snap Circuits training into a regional middle school teacher training event being held on the NNU campus. This one day workshop exposed about 30 leading teachers in the Treasure Valley to the teaching modules and kits for use this coming academic year in their middle schools.

The Boise EDS Chapter is planning on obtaining additional kits which can be used at various K-12 outreach programs. Apart from the events, the kits may be checked out to the teachers who have been trained to use them so that they can use it for in-school teaching. This would be a great opportunity for IEEE/EDS engineers to visit the school at the beginning and end of this experience to make a personal connection with the teachers and kids and to tell them about life as an EDS engineer and motivate them to do well in school and make plans to go to college and join our ranks someday.

Micron Technology Named Recipient of Region 6 Award

By Shyam Surthi

This year, Micron Technology Inc. has been named the recipient of the 'Outstanding Corporate Service to Engineering Community Award' by IEEE Region 6. This annual award recognizes companies, or divisions of a company that encourage volunteerism and community service through its practices. In particular, it recognizes the atmosphere created by the company to facilitate the IEEE volunteers to do their jobs, or supporting the volunteers by permitting free or discounted use of company resources. The proposed citation read "*Micron enhances quality of life by encouraging volunteerism, resulting in team members devoting countless hours of volunteer service to local non-profits and schools.*"

The IEEE officers and volunteers in the Boise section would like to thank the Micron Foundation for providing the forum for IEEE volunteers/activities and supporting the educational outreach programs. In particular, the Micron Foundation has been a financial sponsor for the IEEE Boise Electron Devices Society (EDS) Chapter's annual Workshop on Microelectronics and Electron Devices (WMED) since its inception in 2003. Through the Micron Foundation sponsorship, WMED has made high-quality talks and tutorials from industry and academic leaders available for the past 9 years to thousands of workshop attendees throughout the Pacific Northwest and beyond. The partnership at WMED has also led to a highly successful 'High School Program' which brings in engineers, university students, and technical experts to discuss items of interest to college-bound students. The Boise EDS Chapter hosts a number of events such as its Distinguished Lecturer Event at the Micron facility, as several IEEE Officers as well as EDS Chapter members are Micron employees.

The leadership of Micron Foundation, in terms of designing the programs, has been excellent and a key to promoting science and math education in the Treasure valley and several other locations where Micron has a significant presence. Through the Micron Foundation, the company provides programs that help students see how science, technology, engineering and math play a critical role in everyday life. Micron supports educators who spark a passion in the next generation of engineers, chemists and computer scientists. Its K-12 program promotes improved communication, math, science, and technology skills of K-12 students and encourages students to prepare for and enter technical fields. Approved K-12 Programs include: Classroom Presentations, Career Awareness, School Volunteer, Girls Going Tech, Students at Micron, Chip Camp, Student Mentoring, and Teachers at Micron.

Micron Technology also provides four hours of paid time per semester for involvement in approved K-12 programs, presentations complete with instructions, materials, and equipment to check out for classroom use, as well as coaching on how to conduct classroom presentations or other activities.

The award is a very well deserved recognition for Micron Technology, the Micron Foundation and the IEEE volunteers who have made these initiatives a grand success!

Micron Foundation Website: <http://www.micron.com/foundation>

Section PACE Project Sponsors Local FIRST Robotics Teams

By Joe Rekiere

This year the section PACE project sponsored three FIRST (For Inspiration and Recognition of Science and Technology) robotics teams. The teams from Boise, Meridian and Nampa each received \$200 to help them prepare for and compete in FIRST robotics competitions.

FIRST robotics teams are small teams of high school aged students who design and construct a robot to compete in FIRST competitions.

On August 16th, IEEE members and HP employees were given a chance to see two FIRST teams and their robots at the HP site in Boise. Both the Boise and Meridian teams gave a demonstration of their robots. The teams did a great job of explaining the competition, their designs and demonstrating the abilities of the robots.

The robots stand about four feet tall and have manual and automatic controls to move around and pickup beach ball-sized objects and place them on hooks ranging from three to seven feet high. These robots are designed to compete in high paced events against other robots trying to achieve the same goal. Seeing the robots in action is an impressive sight.

To learn more about FIRST, see <http://usfirst.org>.

Harry Potter Advanced Screening

By Sean Collison

On July 14th, one day before the last Harry Potter Movie (Harry Potter and the Deathly Hallows, part II) was released, 280 IEEE members and their families and friends got to watch the movie early at the Majestic Cinemas. This event was a great success, with the entire theater being sold out days before the show. Numerous people dressed up as characters in the movie which provided a great ambiance for watching the movie. This event was a GOLD (Graduates of the Last Decade) sponsored event.



PEIS Chapter Activities

By Mark Bussert

The PEIS Chapter is still active. With one technical event behind us, we will have one additional technical event this year. If you are interested in leading the PEIS Chapter or participating in PEIS activities, please email Mark Bussert (markbussert@gmail.com) or call 208-871-7424. Please help keep this IEEE chapter going by attending our technical event in November or December. Our next PEIS technical event will be announced soon, so watch your emails and check the website IEEE website & calendar for details.

2011 Boise Section Fall Picnic

By Randy Wolff

The Boise Section held its annual Fall Picnic on September 9 at Municipal Park. The weather was perfect for socializing on a Friday evening. As usual, the BSU Student Branch took care of all the food and drink arrangements. With two grills going, they quickly served up brats, dogs, hamburgers, garden burgers, and spring rolls to the hungry masses. A little over 50 people attended including IEEE members and their families. Two young deer even strolled through the park to add to the fun. Thanks to those who attended, and we hope to see you at a future IEEE event.



Notes:

Company Liaisons

Do you work at a company that employs engineers within our section? We invite each company to have one 'Company Liaison' to join our section's operational committee. The main responsibility of these people is to provide a point of contact to send information from the section Operations Committee to members working at these companies and to return information as to how the needs of their engineers can be met by the section. Company Liaisons are included in email discussions from the OPCOMM, and are encouraged to help advertise section events to members and non-members at their place of employment beyond the section newsletters. They are invited along with all the section members to attend OPCOMM meetings and give us input. If you are interested in being a company liaison, please contact Chris Gunning (cgunning@ieee.org).

Your 2011 Officers:

IEEE Boise Section:

Chair: Chris Gunning
cgunning@ieee.org

Vice-Chair: Shyam Surthi
ssurthi@micron.com

Secretary: Kristen Hopper
kmmcnair@ieee.org

Treasurer: Gary Ashton
gra_tx@yahoo.com

Membership: Jaydip Guha
guhajaydip@yahoo.com

GOLD Chair: Sean Collison
scollison@gmail.com

PACE: Joe Rekiere
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Web Page: Kevin Turner
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Newsletter Editor: Randy Wolff
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Boise EDS Chapter:

Chair: Shyam Surthi
ssurthi@micron.com

Boise PE&IA Chapter:

Chair: Mark Bussert
mbussert@ieee.org

Boise Computer Society Chapter:

Chair: Denise Korman
d.a.korman@ieee.org

Student Branch at Boise State University:

President: Jason Archer

Vice President: Daniel Steik

Secretary: Kyle Straub

Treasurer: Nick Luong
ieee.bsu.officers@gmail.com

Region 6 Northeast Area Chair:

Elisa Barney Smith
EBarneySmith@boisestate.edu



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