IEEE Boise Section
ieeeboise.org
Newsletter
October 2014
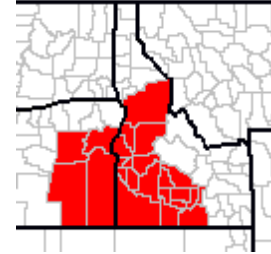
Section News

Region 6 Northeast Area Awards Winner

The Operations Committee (OpComm) would like to extend enthusiastic congratulations to **Jeffrey Bursik** for being selected as this year's Region 6 Northeast Area recipient of the Outstanding Engineering Manager Award. This award is intended to honor IEEE members and current engineering managers who have successfully lead their organizations to significant contributions to research, development, or technology utilizing an appreciation and understanding of Mathematics, Science and Technology and the engineering process in product development. Mr. Bursik, Director of Solid State Drive Product Development at Micron Technology in Boise, will be invited as an honored guest to the IEEE Region 6 Northeast Area Annual Awards Banquet being held in 2015, where he will be recognized for this achievement. Refer to this IEEE awards link for more details about this and other IEEE awards.

IEEEXtreme Competition—BSU Team Finishes in Top 15%

Congratulations to Boise State team Heuristic Heretics members **Jake Blow**, **Justin Weaver**, and **Daniel Butler** for their outstanding performance in this year's IEEEXtreme competition—a global challenge in which teams of IEEE student members, supported by an IEEE student branch, advised and proctored by IEEE members, compete in a 24-hour time span against each other to solve a set of programming problems.

All three team members are Juniors majoring in Computer Science and members of the BSU IEEE Student Branch. They finished 33rd out of 238 teams participating in the U.S., and 264th out of 1760 teams participating worldwide. We would like to thank the IEEE volunteers who proctored at the event and hope to see even more local teams compete next year.

Three Electrical Engineering Students Awarded National Scholarships

Three electrical and computer engineering (ECE) students have been awarded scholarships by the IEEE Power and Energy Society (PES). **Carl Barcroft**, **Cody Breckenridge** and **Shaun Stevens** were among 184 students selected from 95 universities across the United States and Canada for the 2014-2015 academic year. These scholarship recipients have achieved outstanding academic records while balancing other commitments. Carl Barcroft is a junior electrical engineering student minoring in physics and applied mathematics. He has been a part of the NASA Microgravity University program as well as Sodium-Ion battery research under Dr. Xiong at Boise State University. He is IEEE Student Branch Chair at BSU and works part time as an instructor at a hands-on STEM education lab called PCS Edventures. The lab is for youth ages 9-17 and covers all fields of STEM. Cody Breckenridge is an Idaho Army National Guard member and volunteers for the Wyakin Warrior Foundation, which provides education and professional development services for severely wounded or injured veterans. Shaun Stevens is an active member of the Boise State Honors Student Association where he serves as treasurer and peer mentor to incoming freshman. He hopes to have a career which fuses power and embedded systems topics, his two favorite ECE subjects.

The IEEE PES Scholarship Plus Initiative provides multi-year scholarships and career experience opportunities to qualifying electrical engineering undergraduate students. The initiative recognizes undergraduate students who have declared a major in electrical and computer engineering, are high achievers with strong GPAs, have distinctive extracurricular commitments, and are committed to exploring the power and energy field. As long as scholars continue to meet renewal standards, recipients receive up to three years of funding—US$2,000 the first year, $2,000 the second year and $3,000 the third year—interspersed with up to two years of valuable, hands-on career experience. To view a full list of previous PES Scholarship recipients, visit http://www.ee-scholarship.org/about-scholarship/pes-scholars/awardees/2014-2015/. To view a full list of scholarships offered by the IEEE, please visit http://www.ieee.org/membership_services/membership/students/awards/index.html

IEEE Boise Senior Members

IEEE senior membership is recognition of your technical and professional excellence. As a newly elevated Senior Member, you will receive an engraved plaque, and a letter of commendation can be

sent to your employer. You will be eligible to hold executive IEEE volunteer positions, and you will receive a $25 coupon to use to join an IEEE society. These IEEE Boise Section members were elevated to senior membership in 2014.

Salman Akram	Nader I Rafla
Md Zahid Hossain	Nirmal Ramaswamy
Brent Keeth	Thy N Tran
Taehoon Kim	Said Ahmed-Zaid
Marc Patterson	

If you are interested in becoming an IEEE Senior Member, you must meet qualifications for IEEE membership including being an engineer, scientist, educator, technical executive or originator in any IEEE-designated field. You must have been in professional practice for at least ten years and have shown significant performance over a period of at least five years. Note that educational experience is credited towards time in professional practice—three years credit if you hold a bachelor's degree, four years for a bachelor's and master's degree, and five years for a doctorate.

Information about the application process is available on the IEEE senior member website. As part of the application process, you need to identify three current senior members to serve as references. For help getting the process started and finding references, contact the Boise Section Membership Development Chair, Randy Wolff, rrwolff@gmail.com.

IEEE Boise Section subreddit

At IEEE-Boise we aim to have as many actively engaged members as possible without sending out too many e-mails. To achieve this goal, we created a very first subreddit for our Section. Check out /r/ieeeboise (and reddit.com if you are not familiar with it) and subscribe. Post interesting articles, thoughts, or projects on which you're working. Post questions to the leadership team or the general membership. Meme's are welcome too! We hope that reddit's forum structure will inspire new discussions in innovative venues.

2015 Officer Elections

Your service is needed to support your profession and fill the slate of volunteer officer positions for 2015. Volunteering with the Section enables networking with engineers and technical professionals throughout the Treasure Valley. As an officer, you influence how the OpComm spends members' money to provide services to the engineering community and the community at large. Before we conduct officer elections in November, please consider nominating yourself for any of the following volunteer positions. Some of these positions require just a few hours of your time per year. If you are interested in any of these positions or in volunteering in other ways, please contact ieee.boise.chair@gmail.com.

Elected Positions

- **Chair**—set spending priorities, attend Area and Region training meetings, oversee Section and Society Chapter activities, organize and run OpComm meetings every two months
- **Vice-Chair**—assist the Chair with organizing and running meetings and keeping the Section and Chapters organized
- **Secretary**—take minutes at OpComm meetings, schedule meetings using vtools and file short reports after meetings

- **Treasurer**—write a few reimbursement checks, manage the checking account, lead the budget proposal discussion at the end of the year and file a financial report at the beginning of the year

Appointed Positions
- **Membership Development Chair**—keep the e-mail distribution list up-to-date with new members, lead efforts to upgrade eligible members to Senior Members, welcome new members to IEEE
- **PACE Chair**—organize activities of interest to professional engineers such as hosting IEEE Distinguished speakers and organizing donations to K-12 STEM programs
- **Webpage Editor**—maintain Section website including adding new content
- **Newsletter Editor**—collect articles for the newsletter, edit it and release it 3-4 times per year
- **Young Professionals**—organize activities of interest to recently graduated and younger engineers such as Discovery Center Adult Night events

Employment Network
For the past two years, IEEE-USA has been promoting U.S. Sections (Regions 1-6) launching their own Employment Networks. The purpose of these Networks is to provide more local networking opportunities and group support for IEEE members who are seeking employment opportunities. IEEE-USA's Program Manager for Career and Innovation Activities is available to help IEEE Sections with their efforts to start Employment Networks and is offering to locally present IEEE-USA's Employment Network effort as well as update the Section on IEEE-USA's services for members seeking employment. If you are interested to launch such a network within the Boise Section, refer to this link, http://www.ieeeusa.org/careers/employmentnetwork/default.asp, for further details and contact ieee.boise.chair@gmail.com. In addition IEEE-USA has created an IEEE-USA Employment Networks group within LinkedIn for IEEE members wishing to network online and discuss employment-related topics.

Upcoming Events

Fireside Chat with George Mulhern of CradlePoint
Date: 6 November 2014
Time: 18:00
Location: Stoel Rives, 101 S. Capitol Boulevard, Suite 1900, Boise 83702

IEEE-Boise and Startup Grind Boise are proud to be partnering to bring you a fireside chat with George Mulhern, CEO of CradlePoint, who has been CEO of CradlePoint since September 2011. Mr. Mulhern has 25 years of experience in b2b technology and mobile broadband solutions. He served as General Partner at Highway 12 Ventures. Prior, he served as SVP of HP. During his 20 year career at HP, he was responsible for hardware, software and services businesses ranging in annual revenues up to more than $10 B.

Find answers to business and engineering questions such as, how much of the hardware component are they designing in-house? Who is the main client of the Cradlepoint's cloud infrastructure? How did they build the first prototype? Admission is **free for IEEE members** with promotional code **grindIEEE.** Members must register in advance at http://startupgrind.boise to obtain a free ticket to the event. Contact Chris Gunning (cgunning@ieee.org) for additional details.

Evening with NASA Astronaut Steve Swanson

Date: 12 November 2014
Time: 18:30
Location: Boise State University Student Union Building Simplot Ballroom

Astronaut Steve Swanson will be giving a presentation at Boise State on his recent experiences in space. Astronaut Swanson is a wonderful speaker and has prepared a talk with broad appeal across all disciplines. Come join us for an engaging, thought-provoking presentation. This event is free and open to the public. Hourly parking available in the Lincoln Avenue Garage

Rake Up Boise

Date: 15 November 2014
Time: 9:30 a.m.
Location: TBD

We had such a good time volunteering with Rake Up Boise last year that we plan on participating again in this annual Boise event. While this isn't specifically EE related, the Section Executive Committee has broadened our activity list to include public service events. We have registered with the Rake Up Boise site and will be assigned a yard in a couple of weeks.

If you would like to join us, please:
1. Register at this link.
2. Send an e-mail to Randy Wolff (rrwolff@gmail.com) so we are double sure of our head count.

We will e-mail you the meeting location several days before the event. We are planning on starting at 9:30 a.m., which will let you volunteer and still enjoy the rest of your Saturday. We will likely go together after raking to network at a local restaurant over brunch or a snack (this is optional). Family members are welcome to join us.

IEEE Conferences
2015 Rising Stars Conference

Dates: 2-4 January 2015
Venue: Riviera Hotel, Las Vegas
Website: http://students.ieee-region6.org/

As the first of its kind within IEEE Region 6, The Rising Stars conference brings together the most promising students and young professionals from within the region to network and be inspired by each other and the top tech companies from around the world. This conference occurs in conjunction with Storage Visions as well as the Consumer Electronics Show, which both ensue. Check the IEEE Region 6 Student Facebook page for the latest conference news and updates.

IEEE WMED 2015 Call for Papers

Important Workshop Dates
9 January 2015—Manuscript Submission Deadline
6 March 2015—Advance Registration Deadline
20 March 2015—WMED-2015 Workshop

It's time to start considering what you will present at the **2015 IEEE Workshop on Microelectronics and Electron Devices** to be held March 20, 2015 at the Boise State University Student Union Building. This thirteenth annual workshop will provide a forum for reviewing and discussing all aspects of microelectronics including semiconductor processing, electrical characterization, advanced design, and new device technologies. The workshop consists of invited and contributed talks, papers, tutorials and a poster session throughout the day.

Attendance continues to grow, so take advantage of this great opportunity to share your work with engineers and technologists from all around the region. The WMED invites Micron/JDP/JV team members to contribute papers on either completed research or "work-in-progress." Topics in the following areas will form the contributing sessions and poster session of the workshop program:

- Microelectronic device processing and process integration
- Emerging memories and material systems
- Novel device technology and reliability
- Circuit design, device modeling and simulation
- Semiconductor packaging and reliability
- Optoelectronic devices, displays, sensors and MEMS

All accepted manuscripts will be indexed in the IEEE Xplore database. A USB Flash Drive including the papers and presentations is planned and will be available at the start of the workshop. A template containing manuscript preparation instructions can be downloaded.

Submit your IEEE-formatted manuscript (up to 4 pages) by Jan. 9, 2015 to the WMED Publications Chair, Kamal Muthukrishnan (kmuthukrishn@micron.com, +1 208-363-5214). The Technical Program Committee will have a peer-review process to meet the IEEE criterion for minimum standards of quality (details on the website). Questions concerning the conference can be directed to Sourabh Dhir (IEEE WMED 2015 General Chair, sdhir@micron.com, +1 208-363-4478). Additional information for the Workshop can be found at the WMED-2015 website.

2014 IEEE Sections Congress

This past August, IEEE Boise Section Vice Chair Sean Collison attended IEEE Sections Congress in Amsterdam, Netherlands. IEEE Sections Congress is a triennial gathering of IEEE grassroots leadership to network with other Section Leaders, attend training programs, and develop recommendations to guide the future of IEEE. This year's Sections Congress was the first one held outside of the United States. At Sections Congress, numerous presentations focused on enhancing member satisfaction, improving volunteer experience within the section, and reaching globally with a local touch. These presentations were given in the form of standard breakout sessions, learning labs—where a 10-15 minute live demonstration of an IEEE application is given, and a new format called an Ignite session, which was a five-minute presentation intended to spark interest in a particular topic. Some memorable sessions from the event include a breakout session entitled, Developing Your Networking Skills, given by Gary Blank, IEEE USA President. Refer to this link for a copy of this presentation and all other presentations from Sections Congress: http://www.ieee.org/societies_communities/geo_activities/sections_congress/2014/sc2014_breakout_sessions.html. Additionally, streaming recordings of some of the presentations are available from: https://ieeetv.ieee.org. Search on the keywords Sections Congress 2014.

Before each IEEE Sections Congress, section leaders propose a multitude of recommendations for the future direction of IEEE. These proposals are voted on during Sections Congress and the top 5

chosen to be implemented in the next few years. These five recommendations received the most votes at the 2014 event:

- Include free access to the IEEE [Xplore] Digital Library as a member benefit. Promote other IEEE services and products based on their usage and preferences (adopt Google Business Model).
- Develop an incentive and recognition program for companies that invest in full or partial support of their employees' IEEE membership dues.
- Introduce loyalty rewards such as publication access, conference fees, and standards for continued membership.
- Provide a tool to build, promote, record, host, and broadcast technical events at the local level and make them available to IEEE members.
- Enhance vTools for better usability by volunteers and provide a training program to the sections. [vTools are developed and made possible by IEEE volunteers. The toolbox simplifies administration by offering Web-based software, reduces time spent managing activities, and assists in member development.]

Membership Referral

Do you know any colleagues that might be interested in IEEE membership? Check out the programs below, where they can get discounts on membership, and you can earn incentives for helping them sign up.

- New members who sign up now will receive the rest of 2014 and all of 2015. For November, that means new members receive 14 months for the price of 12.
- The Member-Get-A-Member (MGM) program is back. Referring members earn incentives that can be used towards IEEE products, services and membership fees.
- The IEEE-USA incentives program is also back for 2015. Referring members can choose from IEEE-USA branded merchandise in addition to the MGM incentives. There is also a $25 new member discount for new members whom you help sign up through the USA program.

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. These Liaisons provide a point of contact to send information from the Section OpComm 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 e-mail 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 ieee.boise.chair@gmail.com.

Your 2014 Officers

IEEE Boise Section		
Chair	Kristen Hopper	kmmcnair@ieee.org
Vice Chair	Sean Collison	scollison@gmail.com
Secretary	Hao Chen	haochen@boisestate.edu
Treasurer	Stephen Schwarz	stephen.schwarz@hp.com
PACE Chair	Chris Gunning	cgunning@ieee.org

Membership Development	Randy Wolff	r.r.wolff@ieee.org
Webpage Editor	Ross Butler	rossbutler@ieee.org
Young Professionals/GoLD Chair	Sourabh Dhir	sourabh.dhir@gmail.com
Newsletter Editor	Adrian Sitterle	adrian.sitterle@gmail.com
Boise EDS Chapter Chair	Tony Liu	zengtao.liu@gmail.com
Boise PE&IA Chapter Chair	Said Ahmed-Zaid	sahmedzaid@boisestate.edu
Boise Computer Society Chapter Chair	Chris Gunning	cgunning@ieee.org
Boise SPS Chapter Chair	Jun Guo	junguo@u.boisestate.edu
Boise SSCS Chapter Chair	Vishal Saxena	vishalsaxena@boisestate.edu
Boise Life Member Group	Robert Hay	roberthay@boisestate.edu
Boise SIGHT Group	Kip Sikes	kip.sikes.us@ieee.org
Student Branch at Boise State University		
President	Carl Barcroft	ieee.bsu.officers@gmail.com
Vice President	Vlad Calugaru	
Secretary	Suraj Deuja	
Treasurer	Rachana Acharya	
Region 6 Northeast Area Chair	Dan Christenson	Dan.Christenson@us.af.mil

You make a difference when you join the IEEE.