IEEE Boise Section
ieeeboise.org
Newsletter
August 2015
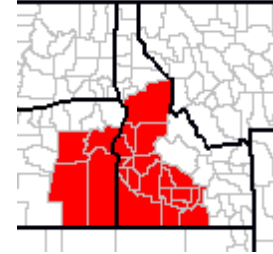
Upcoming Section Events

IEEE Boise Section Annual BBQ / Picnic
Date: September 11, 2015
Time: 6:00 PM – 8:00 PM
Location: Municipal Park – Willow Picnic Site, 500 S. Walnut St.

IEEE Members and their families are invited to attend our annual BBQ / picnic arranged by both the Boise State and NNU Student Branches. Food and drinks will be provided.

IEEE Boise Talk - Photoshopped! Current Research in Detecting Tampered Image Regions

Date: August 31, 2015
Time: 12:00 PM – 1:00 PM
Location: Hewlett Packard Campus (11311 E Chinden Blvd, Boise, ID 83714)
Speaker: Victoria Gunning (MIT Computer Vision Lab)

Photo manipulation and digital cameras are present almost everywhere in society today. The software needed to create convincing altered images is easily available and most everyone has either a cell phone with a camera or a digital camera constantly with them. Because of this and the increased usability and learnability of the photo manipulation software and the readily available cameras, editing and manipulating images convincingly can be done by amateurs. Most people are able to easily take a photo using their cellphone and perform basic image manipulation without having to touch a desktop or laptop. While most of the time image manipulation is performed to enhance an image or create ridiculous scenes for appreciation or entertainment by the individual, there are several contexts in which one would want to know whether an image has been altered. Developing a tool that can detect a camera's unique fingerprint and then detect regions of an image that have been tampered with would apply to several fields such as law enforcement, media, and banking. This talk will present an overview of current research including work being done at the MIT Computer Vision Lab.

Biography: Victoria recently graduated from MIT in Computer Science and Engineering and is currently an intern at HP. She will return to MIT this fall to pursue an M.Eng. degree focusing in Human Computer Interfaces and Graphics. She will also be a TA for the Edgerton Center's popular Strobe Project Lab. In her spare time, she enjoys projecting movies for MIT's Lecture Series Committee (LSC) and spending time with her friends, figure skating, sailing, skiing, and baking cookies and pies.

The talk will be open to the public but we'll need visitors (non-HP employees) to be in the lobby at least 10 minutes before the talk starts, and we'll escort them to the meeting room. They'll also need to bring a government-issued photo ID to sign in.

This talk is sponsored by the IEEE Boise Chapters of the Computer Society and Signal Processing Society.

IEEE PES Power Courses

Date: September 2nd – September 4th

The IEEE will be offering three courses, "Plain Talk About the Electric Power Industry", between September 2-4, hosted by Idaho Power. The courses are geared toward helping non-engineers understand technical aspects of the electric power industry. PES Plain Talk courses for the Power Industry Professional will help you to understand technical aspects of the Electric Power System, even if you do not have an engineering background. You will gain insights into the concerns of engineers, the demands of regulators and consumer groups, and the factors and trends that impact the operation of today's electric power systems. These courses are also appropriate for non-power engineers who are transitioning to the electric power industry. These courses are eligible for CEU/PDH continuing education credit.

Courses include:
      • Power System Basics – Understanding the Electric Utility Operation Inside and Out, Sept. 2

       • Distribution System – Delivering Power to the Customer, Sept. 3
       • Transmission System – The Interconnected Bulk Electric System, Sept. 4

You can register for one, two or all three courses. Each one-day course is eligible for credit equivalent to eight professional development hours.

For additional course details and registration information, go to:
http://www.ieee-pes.org/plain-talk-in-boise-sept-2015

Section News

K-12 STEM Grants

IEEE Region 6 is doing a big push on STEM activities this year. To support this, the Boise Section is offering STEM grants of $100 and higher to section members. Acceptable topics are flexible. Do you have a good idea? Something you would like to do with your kid's school, or the school district in which you live? Find a second IEEE member and let us know. We have budgeted to award several. To apply please submit the following information:

       Member 1 Name:
       Member 1 IEEE number:
       Member 2 Name:
       Member 2 IEEE number:
       Proposed Topic Name:
       Proposed Topic Description (100-500 words).
       Proposed School or youth group:
       Budget:

Applications will be evaluated on a revolving basis for the remainder of the year. If it goes well, we'll continue it next year.

Submit your application to Elisa Barney Smith <EBarneySmith@BoiseState.edu>.

Young Professionals MGA Meeting in Panama City, Panama

Sean Collison, the IEEE Boise Chair and Region 6 Young Professional Chair attended the 2015 MGA Young Professionals Meeting in Panama City, Panama this past May. During this meeting, IEEE Young Professionals from all over the world met to discuss the global direction of the IEEE Young Professionals Affinity Group. Four major breakout projects were worked on during this meeting, including:

- Updating the Young Professionals Communication plans to on-board and engage members through IEEE Collabratec in addition to revitalizing and re-branding the IEEE GOLDRush Blog.
- Determining if there is an interest among Young Professional's for an entrepreneurship programs aimed specifically for them, as well as launching community engagement workshops in partnership with IEEE SIGHT.
- Creating a new unified online portal to replace the current IEEE Young Professionals website.
- Each Region is now tasked with organizing a Young Professionals meetup / panel event at a global conference in their Region. The Region will provide $1000 in funding and MGA will also provide a matching $1000 in funding. In Region 6, we held our event at the International Microwave Symposium in May, 2015 in Phoenix, AZ.

Additionally, as part of the trip, all attendees were given the opportunity to tour the Panama Canal Expansion Project. The tour was incredible, where the group got to visit the new set of Locks on the

Pacific Side of the canal and was the last tour group before the Locks were flooded. A picture of Sean standing in front of the new set of Locks is below.

IEEE Region 6 Rising Stars Conference

As the premiere student event 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. It will be taking place the first week in January, 2016 at the Excalibur in Las Vegas, Nevada. This conference is in conjunction with Storage Visions as well as the Consumer Electronics Showcase which both occur just after the conference. For more information on the conference and if you are interested in attending, visit: http://sites.ieee.org/risingstars/.

IEEE Senior Membership

Are you interested in becoming a senior member of the IEEE? Read on to find out the benefits, eligibility requirements and how to apply.

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 get a $25 coupon to use to join an IEEE society.

To be eligible, 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 on the application process is available on the IEEE senior member website. As part of the application process, you will 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@micron.com>.

Micron TLP Promotions Announced & Reminder

13 July 2015—Micron Technology's Technical Leadership Program (TLP) announced promotion of 41 team members within the program, including 32 to the rank of Senior Member of the Technical Staff (SMTS) and 9 to the position of Distinguished Member of the Technical Staff (DMTS).

The Technical Leadership Job Framework has five progressive career points determined by the member's technical contributions to the company: SMTS, DMTS, Fellow, Senior Fellow and Principal Fellow. Advancing in the TLP is a rigorous process that includes nomination and ratification by members of a technical council who operate outside the nominees' reporting structure.

Congratulations to the following IEEE Boise Section members included in this significant professional distinction:

- DMTS: Perry Lea
- SMTS: Wayne Kinney, Chandra Tiwari

Note that if you are a member of Micron's TLP program as Senior Member of Technical Staff (SMTS) at level F1 or higher, the TLP member budget allots $200 per member per year to put toward items such as professional membership dues. This $200 covers nearly 100% of IEEE membership dues, so be sure to renew your membership and encourage your fellow TLP members to join IEEE and take advantage of this TLP member privilege.

Jobs!

MotivePower

MotivePower in Boise has a great opportunity for Electrical Engineers. They are looking for individuals who enjoy working in a fast-paced production environment, have a strong safety focus and who align with the company's values of Safety, Customer Focus, Continuous Improvement, Teamwork, and Leadership. This position is responsible for the design, development, testing and implementation of Electrical Engineering projects from concept to final assembly. This role includes leading teams in design of plans, schematics and wire running lists while ensuring compliance with safety regulations and requirements. To apply, go to: https://careers-wabtec.icims.com and search for jobs located in Boise, ID.

Call for Section Treasury Auditors

The IEEE Boise Section is looking for volunteers to help audit our finances for the year. If you are interested, please contact Sean Collison <scollison@gmail.com> or Steve Schwarz <schwarz.steve@gmail.com>.

Section Rebate

Each year, all IEEE Sections receive a rebate / funding from MGA headquarters. The valuation of this rebate is based upon the number of members in the Section, along with the number of active Affinity Groups, Chapters, and Societies. This year, the Boise Section received a rebate of $5,430.70.

Funds from the rebate each year, go to sponsoring speakers, our annual BBQ, our Annual Banquet, and K-12 STEM Activities.

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.

- The Member-Get-A-Member (MGM) program is back. Referring members earn incentives that can be used towards IEEE products, services and membership fees.

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Senior Design Projects

BSU's College of Engineering is getting prepared for the fall semester. We have 50 EE seniors this year and are looking for senior design projects. Projects are done in teams, and may include students from Mechanical Engineering. Students start researching the project in the fall, and then work on it extensively in the spring. We value having corporate sponsored projects that let our students see the "real world" and interact with "real engineers." If you think your company might be interested in sponsoring a project, please contact Brian Higgins <brianhiggins@boisestate.edu>.

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>.

New Student Branch at NNU

After several years of hard work, Northwest Nazarene University in Nampa has received ABET accreditation for its Bachelors of Science in Engineering program <https://engineering.nnu.edu/engineering>. This program is a general engineering program, with concentrations in electrical engineering, mechanical engineering or engineering physics. Amidst all that hard work they have successfully started an IEEE student branch. Together with BSU's student branch they will be catering the Boise Section's fall picnic. Come out and meet them.

Your 2015 Officers

IEEE Boise Section		
Chair	Sean Collison	scollison@gmail.com
Vice Chair	Hao Chen	haochen@boisestate.edu
Secretary	Yunpeng Zhang	poweryp@gmail.com
Treasurer	Stephen Schwarz	stephen.schwarz@hp.com
PACE Chair	Kristen Hopper	kmmcnair@ieee.org
Membership Development	Randy Wolff	r.r.wolff@ieee.org
Webpage Editor	Vacant	e-mail scollison@gmail.com if interested
Young Professionals/GoLD Chair	Vacant	e-mail scollison@gmail.com if interested
Newsletter Editor	David Scott	djscott@gmail.com
Boise EDS Chapter Chair	Tony Liu	zengtao.liu@gmail.com
Boise PES Chapter Chair	Milorad Papic	mpapic@idahopower.com
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	Jeff Riordan	ieee.bsu.officers@gmail.com
Vice President	Seth Townsend	
Secretary	Haseeb Nain	
Treasurer	Nodira Turaeva	
Region 6 Northeast Area		
Chair	Dan Christenson	Dan.Christenson@us.af.mil
Vice Chair	Chris Gunning	cgunning@ieee.org

You make a difference when you join the IEEE.