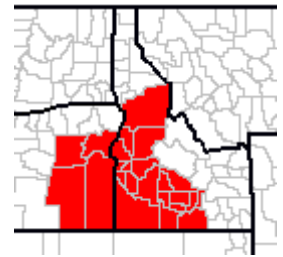# IEEE Boise Section Newsletter January 2010

Upcoming Events:

Wednesday, February 17th – Engineers Week Banquet
   Date/Time: February 17th, 6:30pm (doors open 6:15)
   Location: Boise State University, Student Union Center (Lookout Room)

Friday, April 16th – Eighth Annual Workshop on Microelectronics and Electron Devices
   Date/Time: April 16th, 8:00am – 6:00pm
   Location: Boise State University, Student Union Center (Jordan Ballrooms)

Event Details:

IEEE Boise Section Engineers Week Banquet

LOCATION: Boise State University, Student Union Center (Lookout Room)

DATE: Wednesday, February 17, 2010

TIME: 6:30 pm

COST: $20 for IEEE members and their guest, $35 for non-members, $15 for students
   Pay at the door

MENU: Chicken Florentine or Vegetarian

RESERVATION: Make reservations at http:/ieeeboise.org.

GUEST SPEAKER: Gordon Day, 2009 President of the IEEE-USA

TOPIC: Prosperity, Innovation, and Engineering Brain Power

If innovation is the key to American competitiveness and prosperity in the 21st century, then engineering brain power is the essential ingredient. Engineers create jobs, perhaps more than any other profession. Through the development of their ideas, existing companies grow and new companies are born. This talk will explore the public policy aspects of maintaining a vibrant engineering workforce by examining five important questions: Who thinks we need more (or fewer) engineers? What are the trends? Is the flat world a threat, an opportunity, or a strategy? If we need more engineers, should we grow them or import them? How do we show our children that engineers change the world?

Gordon Day was the 2009 President of IEEE-USA, the unit of the Institute of Electrical and Electronics Engineers (IEEE) that supports the career and public policy interests of 210,000 IEEE members in the U.S. He is also a past president of the IEEE Photonics Society, and a candidate for IEEE President-elect in the 2010 election. Day spent 33 years in research and management at the National Institute of Standards and Technology, Boulder, Colorado, Laboratories, where he contributed to some of NIST's best known research in optoelectronics. In 1994, he founded the NIST Optoelectronics Division and guided it to an international reputation for measurements and standards. Since retiring in 2003, he has served as a science advisor to Sen. Jay Rockefeller and as Director of Government Relations for the Optoelectronics Industry Development Association. He is a Fellow of the IEEE, the AAAS, the Optical

Society of America, and the Institute of Physics (UK). He received a Ph.D. in electrical engineering from the University of Illinois.

IEEE Workshop on Microelectronics and Electron Devices (WMED-2010)

LOCATION: Boise State University, Student Union Center (Jordan Ballrooms)

DATE: Friday, April 16, 2010

TIME: 8:00am – 6:00pm

COST: See website for registration fees and deadlines

http://www.ewh.ieee.org/r6/boise/wmed2010/WMED2010.html
For additional details, contact Bill Kueber (billrk@ieee.org)

Letter from the Editor

Happy New Year! In this edition, you will find announcements of our new officers, news from last fall, and two added sections: one with links to help with networking in the Boise area and the other announcing our new senior members. This edition is the final one for me as editor. A new editor will be announced soon. I have enjoyed resurrecting our newsletter and learning how to put it together. It has been a privilege to serve our community and I hope you enjoyed receiving the news about the many activities and accomplishments that take place in our section and chapters. I think the newsletter plays an important part for our section as a means to share the activities and accomplishments, and for a large community like ours to stay connected. I hope it continues. As always, in my volunteering, what I enjoy most is meeting and working with our members. I think we have a great group of talented engineers. In closing, I would like to thank all the contributors for their articles, to the members that made suggestions for improvement and to Mark Bussert our 2009 chair for his support of the newsletter. I wish you all a prosperous 2010.
Joe Rekiere (jrekiere@ieee.org)

Section News:

Section Election Results

The section completed its election of officers for 2010 and announced the results January 17, 2010. Congratulations to our new officers for 2010.

Chair: Chris Gunning

> Chris Gunning is a firmware architect in the Value LaserJet R&D lab at Hewlett-Packard. He received his B.S. in Computer Science and Engineering from MIT and his M.S. in Electrical Engineering from Stanford. He is co-inventor on sixteen U.S. patents covering a range of areas including font technology, authentication, and copiers. He was the 2009 chair of the IEEE Boise Computer Society. Chris lives in Boise with his wife, daughters, and two spoiled cats. In his free time, he enjoys alpine skiing, mountain biking, and camping.

Vice Chair: Shyam Surthi

> Shyam Surthi is a Senior Process Integration with the DRAM process R&D team at Micron Technology, Inc. He received his B.S. and M.S. in Chemical Engineering from the University of Bombay and Ph.D. degree in Electrical Engineering from the University of Alabama. He then joined North Carolina State University as a post-doctoral research associate and worked on hybrid Si/molecular memories. At Micron, Shyam has been a part of the thin films process development team and is currently involved module development and electrical

characterization. He has co-authored 24 referred publications in journal and conference proceedings. Shyam has been actively involved with the IEEE Electron Devices Society Boise chapter and the Workshop on Microelectronics and Electron Devices (WMED) and was the General Chair of WMED-2009 held on April 3, 2009 in Boise.

Secretary: Kristen Hopper

Kristen Manon McNair Hopper, an IEEE Senior Member, most recently served as the European Automotive Customer Marketing Manager at Analog Devices Micromachined Products Division in Cambridge, MA. She previously worked in Engine Management at Infineon Technologies in Munich, Germany, as Technical Marketing Staff Engineer, at Delphi Technical Centre in Luxembourg as an Electronics Systems Engineer and at Delphi in Indiana as Advanced IC Project Engineer and MEMS Process Engineer.

Mrs. Hopper received her Master of Science in Electrical Engineering from the University of California at Berkeley and her Bachelor of Science in Electrical Engineering from Cornell University.

Treasurer: Randy Wolff

Randy Wolff is continuing in the Treasurer position. He has previously been the GOLD affinity group chair and Chair of the Montana State University Student Section. He currently leads a Signal Integrity component modeling team within the Signal Integrity R&D group at Micron Technology. He graduated cum laude from Montana State University with a BSEE in 1999.

Membership Chair: Jaydip Guha

GOLD Chair: Greg Gatlin

PACE Chair: Joe Rekiere

Joe develops embedded firmware for MFPs at Hewlett-Packard. He received a BS in Electrical Engineering and a MCS from Arizona State University. He was the 2009 newsletter editor for the IEEE Boise section and speaker chair for the IEEE Boise Computer Society. Joe is a CSDP (Certified Software Development Professional).

Website Developer: Kevin Turner

Newsletter Editor: To Be Announced

The remainder of the bios will be posted to the ieeeboise.org web site.

Boise EDS Chapter Gains Senior Members

By Shyam Surthi, Boise EDS Chapter Chair

The Boise EDS Chapter took on an initiative to elevate eligible members to the grade of Senior Member. We were able to encourage some of the most senior member in the local IEEE community to apply for the elevation and succeed in attaining this very prestigious ranking within the IEEE society. The Sr. Member Elevation Campaign was kicked off in mid-2008. As of December 2009, we have helped promote 19 additional members to the Senior Member status. With these grade elevations, about 50% of the EDS Chapter members are at the grade of Senior Member. Please join us in congratulating them for this special honor. Their names and the month in which their application was approved are listed below:

October 2008
Vishwanath Bhat, Pai-Hung Pan

November 2008
 Jim Browning, Jaydeb Goswami, Douglas Hackler, William Knowlton, Randy Koval, Inna Patrick

January 2009
David Butler, Roy Meade

June 2009
Jaydip Guha, William Kueber, Prashant Raghu, Nirmal Ramaswamy, John Zahurak

October 2009
Jie "Jason" Sun, Werner Juengling, Zengtao "Tony" Liu

November 2009
Kyu Min

Senior Member is the highest grade for which IEEE members can apply. To be eligible for application, candidates must:
a)   be engineers, scientists, educators, technical executives, or originators in IEEE-designated fields;
b)   have experience reflecting professional maturity;
c)   have been in professional practice for at least ten years (your educational experience is credited as:- BS: 3 years; BS and MS: 4 years; PhD: 5 years);
d)   show "significant performance" over a period of at least five of their years in professional practice.

If you are interested in a Senior Member nomination, the IEEE Boise Section and the Chapter officers (http://ieeeboise.org/) will be able to help you with the online application and reference processes. For more information of the IEEE Senior Member Grade, please visit: http://www.ieee.org/web/membership/senior-members/index.html

Boise EDS Chapter Hosts IEEE Expert Now Seminar: "Challenges Near the Limit of CMOS Scaling"

By Shyam Surthi, Boise EDS Chapter Chair

As a part of the EDS Boise Chapter initiative to promote technical activities, we held two events with the use of IEEE Expert Now course. The course (video format) chosen for these events was "Challenges Near the Limit of CMOS Scaling," a course designed by Prof. Yuan Taur of The University of California – San Diego. The attendees had an opportunity to learn about new materials/devices required for continued CMOS scaling to 10-nm regime and participated in discussions led and moderated by local experts in the field of CMOS devices.

The first event was held on December 2, 2009 at Boise State University's College of Engineering (Room 106, Micron Engineering Building). The event was moderated by Steve Groothuis of SimuTech Group, who is the EDS Chapter Chair for 2008-2009. The event was a great success with attendance of 57 of which 36 were student with rest being faculty and engineers. Of the 57 attendees, almost half were IEEE members.

The second event with the same course was held at Micron Technology, Inc., 8000 S Federal Way, Boise ID (Room 206AB, Building 36). This was a joint event with co-sponsorship from Micron's Technical Leadership Program (TLP). This event was moderated by David Hwang, a Distinguished Member of Technical Staff within Micron's TLP. This event was attended by 25 engineers of whom six were IEEE members.

The IEEE Boise EDS Chapter would like to thank BSU College of Engineering and Micron's TLP for supporting this educational effort. The IEEE Expert Now Courses are based on the best IEEE educational tutorials and workshops (http://www.ieee.org/web/education/Expert_Now_IEEE/index.html). The entire course listing can be found here: http://www.ieee.org/web/education/Expert_Now_IEEE/Catalog/components.html

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BSU event, 12/2/2009: Attendees at the short course "Challenges Near the Limit of CMOS Scaling"

BSU event, 12/2/2009: Boise EDS Membership Chair, Shyam Surthi, introducing the IEEE Expert Now course

IEEE provided feedback surveys for all attendees to complete after the event and judging from the response, the feedback was positive with attendees appreciating the opportunity to participate in a learning event. We hope to provide quality educational materials via the IEEE Program to enhance local educational activities and further support the value of IEEE Membership for members in Boise area.

Boise Computer Society Fall Banquet

By Joe Rekiere, Newsletter Editor and BCS Chapter Speaker Chair (2009)

On Wednesday evening October 28th, the Boise Chapter of the Computer Society held their annual banquet at Boise State University student union. About 20 members attended to have dinner and listen to Dr. Yousif present on the topic of Grid and Autonomic Computing. The evening was a success and offered members an opportunity to meet with other chapter members, have a great dinner and learn from an excellent speaker.

Each year the chapter volunteers work to find high quality and well polished presenters for their annual banquet. Last fall, they selected Dr. Yousif a DVP speaker from the Computer Society's Distinguished Visitor Program. Using the DVP speaker, the chapter saves money and enables the chapter to invite excellent presenters from outside the Boise area. Based on the survey results, the last DVP speaker gave a well received presentation.

The Boise Computer Society would like to thank BSU and the BSU IEEE student chapter for their support of the evening.

New Senior Members

Congratulations to the newly elevated senior members in the Boise section.

> David Butler
> Byron Flynn
> Jaydip Guha
> Kristen Hopper
> Werner Juengling
> William Kueber
> Arvind Kumar
> Zengtao "Tony" Liu
> Roy Meade
> Prashant Raghu
> Nirmal Ramaswamy
> Jie "Jason" Sun
> John Zahurak

Notes:

Career and Networking Resources

IEEE Career Resources	http://ieee.org/web/careers/home/index.html
IEEE * USA	www.ieeeusa.org
Idaho TechConnect	www.idahotechconnect.com
Kickstand	www.kickstand.org
TechBoise	www.techboise.com
Toastmasters	http://reports.toastmasters.org/findaclub

IEEE Official LinkedIn Group

IEEE has its own official LinkedIn group.

The following is excerpt from the main page of the IEEE LinkedIn group.

This group contains Members of the IEEE, a non-profit organization and the world's leading professional association for the advancement of technology. Managed by IEEE staff, this is the only global IEEE group on LinkedIn that is verified against the official IEEE membership database. Active IEEE membership is required. For immediate approval, an IEEE email alias should be selected and confirmed as the contact email during the group application process.

If you do not have an IEEE.org email alias please visit http://eleccomm.ieee.org/ to obtain it. Be sure to add it to your LinkedIn profile prior to applying for the group to assure an instant approval; note that Linked In will first send a verification message that must be opened to confirm the address.

FYI - If an IEEE.org email domain is not provided during the group application process you could face a significant delay as they manually review all submissions sent with a different email domain. Approval in this case is based on matching Name and Email provided during the LinkedIn groups application process to the IEEE membership database.

http://www.linkedin.com/groups?home=&gid=23804&trk=anet_ug_hm

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 OPCOM, 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 OPCOM meetings and give us input. If you are interested in being a company liaison, please contact Chris Gunning (cgunning@ieee.org).

Do We Have Your Correct E-mail?

If you haven't been receiving the newsletter or event notices electronically, verify your email address on your mailing label. Please notify both the IEEE (address-changes@ieee.org or http://services1.ieee.org/membersvc/coa/intro.htm and the Boise Section Chair Chris Gunning (cgunning@ieee.org) so we can add you to our electronic mailing list (we get address corrections only once a month from the IEEE). Plans for events come about between newsletters. To assure that you get timely information about IEEE Boise events, please make sure we have your correct email address in our address database.

How can the Boise Section better meet your needs?

The Boise Section officers would like to make the best use of our dues to meet the needs of the engineers in the Boise section. The section currently provides for or partly subsidizes speakers, banquets and picnics through the use of your annual dues. If you have ideas on how to best meet the needs of the sections engineers, contact one of the officers.

Volunteering – IEEE Members Get Involved

Volunteering is a good way to meet people and make a difference in your community. Volunteering is a way to connect with others that share similar interests. Volunteering also helps make contacts that can lead to internships and future jobs.

Getting Started:
- Contact your local IEEE section and chapters
- Learn about the IEEE Educational Activities Board
- Get Involved with the IEEE Standards Association
- Participate in a technical society or technical council
- Get involved with the IEEE Technical Activities Board
- Shape and promote USA technology policy and professional activities through IEEE-USA
- Organize an IEEE Conference

See *How to Volunteer* at www.ieee.org/web/volunteers/home/index.html

Your 2010 Officers:

IEEE Boise Section:

Chair: Chris Gunning
cgunning@ieee.org

Vice-Chair: Shyam Surthi
ssurthi@micron.com

Secretary: Kristen Hopper
kmmcnair@ieee.org

Treasurer: Randy Wolff
rrwolff@micron.com

Membership: Jaydip Guha
guhajaydip@yahoo.com

GOLD Chair: Greg Gatlin
ggatlin@micron.com

PACE: Joe Rekiere
jrekiere@ieee.org

Web Page: Kevin Turner
kevin@kmturner.com

Newsletter Editor: TBA

Boise EDS Chapter:

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ssurthi@micron.com

Boise PE&IA Chapter:

Chair: Mark Bussert
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Boise Computer Society Chapter:

Chair: Denise Korman
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Student Branch at Boise State University:

Chair: Cameron Stewart
ieee@boisestate.edu

You make a difference when you join the IEEE.

ieeeboise.org