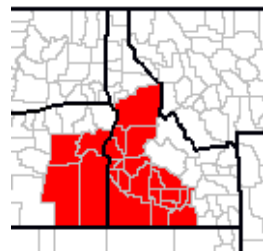




# IEEE Boise Section Newsletter January 2013



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## Upcoming Events

### January 26<sup>th</sup> – IEEE Boise to Present an Award at Future City Competition

On Saturday, January 26, 2013, two members of the IEEE Boise Section will judge and present the **Best Communications System** Award at the 9th Idaho Regional Future City Competition. The criterion of the award is to evaluate the strategic placement of a communications system that is both efficient and accurate for the city design. The competition will be held in the Simplot Ballroom on the 2nd floor of the BSU Student Union Building. For more information on the event, go to <http://www.futurecityidaho.org/>.

### January 29<sup>th</sup> – Wine and Cheesecake Social

Time: Tuesday, January 29th 7-9pm  
 Location: Telaya Wine Co., 107 1/2 E. 44th Street, Garden City, ID  
 RSVP: [https://meetings.vtools.ieee.org/meeting\\_registration/register/16307](https://meetings.vtools.ieee.org/meeting_registration/register/16307)

The Boise Section will be hosting a Wine and Cheesecake social on Tuesday January 29th 7-9pm at Telaya Wine Co. in Garden City. Bring a guest and join us for a relaxing networking evening. For \$5 attendees can sample glasses of 3 different Telaya wines. Cheesecake will be available for purchase for \$1 per piece. We will also be doing a variation on SWE's Geek Jewelry activity (see image to left) building Geek Wine Glass Charms (wine glass charms built with discrete electrical components and beads). These are things that every proud geek should want to have a set of for their next private party. Telaya Wine Co. is located between 43rd and 44th street on a small street parallel to Chinden Blvd 1/2 block to the north. RSVPs appreciated so we can purchase the appropriate amount of cheesecake.

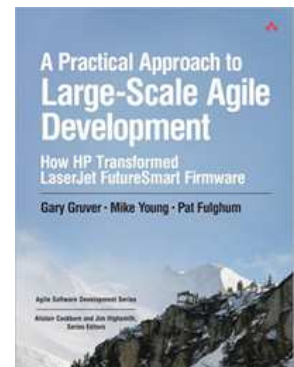


IEEE Boise Computer Society Technical Presentation  
**Guest Speaker: Mike Young, Co-author of**  
**A Practical Approach to Large-Scale Agile Development: How HP**  
**Transformed LaserJet Future Smart Firmware**

HP's LaserJet firmware runs on millions of products in the field and has a 25 year legacy of success. But along with that legacy, it had become unwieldy. It was architected for simple printers but now needed to be optimized for complex multi-function products, market forces demanded a much quicker response to deliver new products and features, and the organization struggled to keep up with increasing quality expectations along with complex feature interactions. Even with increasing investment, firmware was always the bottleneck.

In 2008, cost cutting forced a change. In desperation, HP turned to agile and lean principles to figure out how to transform their development and test processes. The complex LaserJet firmware system had to be re-architected from the ground up. Using Scrum with 4-week Sprints to prove things out incrementally, they completely re-architected the code base and transformed the way they did development and test. HP created tools, technologies, and an organization that embraced change and scaled agile processes normally used for small teams to a large-scale, distributed R&D group.

This is their 3-year story. While transforming over 400 world-wide developers and testers into an effective agile machine, HP found ways to utilize continuous integration and a multi-layered automated testing system to revolutionize new product and feature delivery. Mike shares the real world business results and technologies that came from this agile transformation of HP LaserJet Future Smart Firmware.



Mike has been doing large-scale software/firmware development for 22 years. He is the co-author of a book just published in November 2012 entitled *A Practical Approach to Large-Scale Agile Development* (part of the Agile Software Development Series from Addison-Wesley). The book chronicles a recent large-scale agile transformation that Mike helped lead at HP.

Mike is a senior program manager and agile coach at HP, and spends most of his time monitoring agile effectiveness, finding waste in development and test, and guiding the organization on a path to incrementally improve. He is a big proponent of adopt-as-you-go agile practices. Start small, create success, and then listen to those in the trenches to keep improving.

**Time:** Wednesday, January 30<sup>th</sup>, 2013, 7:00 PM

**Location:** Boise State University, Student Union, Simplot B Room

IEEE Boise Computer Society: <http://www.ewh.ieee.org/r6/boise/computer/>

Please contact Joe Rekiere ([jrekiere@ieee.org](mailto:jrekiere@ieee.org)) for additional information.



## Wednesday, February 20<sup>th</sup> – IEEE Boise Section Annual Banquet

Time:

- 6:30 pm – Doors open for reception (including cheese/fruit hors d'oeuvres)
- 7:00 pm – Dinner served
- 7:30 pm – Presentation begins

Location: Boise State University, Student Union Center – Jordan Ballroom A

Normal Registration Fee / Early Registration Fee:

- \$30 / \$25\* for IEEE members and their guest
- \$35 / \$30\* for non-members
- \$15 / \$10\* for IEEE student branch members

Registration and Payment URL: [https://meetings.vtools.ieee.org/meeting\\_view/list\\_meeting/16171](https://meetings.vtools.ieee.org/meeting_view/list_meeting/16171)

Early registration with reduced rate deadline is February 6th, 5:00pm. Normal registration will close **February 13th at 5:00 pm**. Payment is only accepted on-line through the registration link above.

Buffet Menu: Grilled chicken with a chorizo and wild mushroom ragout, seared Idaho trout with a butter caper sauce, rosemary roasted potatoes, fresh tossed greens with a huckleberry vinaigrette, northwest apple salad, asparagus, cheese tortellini with sundried tomato pesto, pine nuts and rolls with butter.

### **Topic: “HP's Revolution in Printing Technology: From the Desktop Printer to the High-Speed Commercial Press”**

In 1984 HP introduced its first office oriented laser and inkjet printers. Since that day the technology has exploded to where it now enables small desktop multifunction devices that cost under \$50 that deliver lab quality photo prints up to \$3 million dollar digital web presses that print thousands of pages per minute. One of the technology enablers for this explosion in digital printing is the imaging systems. These systems are designed to support complex high speed image processing at very low costs, yet are scaled up to high end production presses. This talk will discuss the history of HP's printer imaging, how photo quality imaging is supported in such low cost products, and how HP supports image processing for web presses that can process over 100 billion drops per second. In addition to an overview of some of HP's latest print technologies, design tradeoffs will be explored between software, dedicated imaging ASICs, and programmable hardware as well as the imaging pipelines used on HP's latest products.

**Guest Speaker:** Steven Miller

Steven Miller is an HP Fellow and technical leader in HP's Printing and Personal Systems Group. Steven joined HP straight out of college in 1985. Since then, he has been inventing and commercializing many of HP's key products and technologies that fueled the rise of HP's core inkjet printing businesses. His expertise is in digital imaging systems, printing technologies and architectures, and product system architecture development. Steven has significant experience in bringing new technologies to market and has been granted 13 patents for his work on printing and imaging including the key High Performance Architecture and HP ColorSmart patents.



Steven has been the system architect for numerous platforms including personal and office inkjet printing systems, photofinishing systems for retail and central lab photo fulfillment, and digital imaging architectures shared across the Imaging and Printing Group. He is currently focused on the development of future printing platforms.

Steven holds bachelor degrees in Electrical and Computer Engineering and Computer Science from Oregon State University. He currently lives in Vancouver, Washington with his wife and is an empty nester with his twin son and daughter attending Washington State University.

## Friday, April 12<sup>th</sup> – IEEE Workshop on Microelectronics and Electron Devices (WMED)

Time: 8:00am – 6:00pm

Location: Jordan Ball Room, Student Union Building, Boise State University

URL: <http://www.ewh.ieee.org/r6/boise/wmed2013/WMED2013.html>

## WORKSHOP DESCRIPTION

The **2013 IEEE Workshop on Microelectronics and Electron Devices (WMED)** will be held at Boise State University Student Union Building on 12th April 2013. This international workshop is designed to provide a stage for discussion, review and deliberation on different aspects of Silicon and non-Silicon technologies that include device technology, future and current challenges in IC processing, advanced design techniques. The workshop is divided into different sections that include invited talks from university and industry, tutorials, contributed papers and poster session. This year's workshop is a perfect opportunity for students and professionals to share their ideas and technical know-how with technologists and engineers from all around this region. This year, WMED will host some of the distinguished professors and technologists who have spearheaded some of the most exciting technologies and ideas in their respective fields. Dr. Chris Mack, the name synonymous with Photo-Lithography, will be the keynote speaker talking about next generation lithography. WMED 2013 organization committee is also excited to present few other very interesting topics like MEMS, next generation memory architecture, future of CMOS, 3D IC integration, High speed and power efficient design.

The WMED-2013 will also have a High School program in conjunction with the main conference in order to support the effort of encouraging STEM education among High School Students in the Treasure Valley area. WMED has adopted High School program for the last six years successfully. This year's High School program will be a half day event which will include the keynote talk and a panel discussion constituting of engineers from all age groups who will relate their experiences and take questions from the students about careers in engineering.

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## Announcements

### Boise Mini Maker Faire Update

By Randy Wolff

The Boise Mini Maker Faire will be taking place on May 25-26, 2013. This will include events for the whole family hosted at the Library! and at the Discovery Center. Boise Mini Maker Faire is a newfangled fair that brings together science, art, crafts, design and engineering, mixed in with music and wonder in a fun, energized, and exciting public forum. The Faire hopes to inspire people of all ages to roll up their sleeves and become makers. This family-friendly event will showcase the creative work of all kinds of makers – anyone who is embracing the DIY spirit and wants to share their accomplishments with an appreciative audience.

The Boise Mini Maker Faire is being sponsored by the IEEE Boise Section. We highly encourage local IEEE members to plan to participate as attendees or Makers in this exciting event. Wondering if you are a Maker? The reality is EVERYONE makes something. Making things, building and creating are intrinsic to our lives. We make food, music, machines and happiness. This is what you have been waiting for, a chance to share your creations with a supportive and engaged audience. Enter your project now!

The first step to participating in Boise Mini Maker Faire is to submit an entry telling them about yourself and your project. You'll provide a short description of what you make and what you would like to bring to Boise Mini Maker Faire, including links to photographs and/or videos of your project. They particularly encourage exhibits that are interactive and that highlight the process of making things. Go to <http://boisemakerfaire.com/> for more information and to submit your application today.

### 2013 Officer Elections

By Elisa Barney Smith

With the New Year comes the need for all IEEE units to have new officers. Offices are only allowed to serve 2 consecutive years except in extreme circumstances. We didn't get many nominations for candidates, so write-ins are included in our ballot. Please nominate yourself or a colleague. Most positions don't require a large time commitment. By tradition, bi-monthly administrative meetings (open to ALL section members, not just officers) usually include homemade cookies as incentive and thanks for your attendance. Please visit: [https://voting.vtools.ieee.org/tego/\\_ballot/vote/2497](https://voting.vtools.ieee.org/tego/_ballot/vote/2497) and cast your votes. Voting closes on Feb 1st.

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## Section News

### Boise Signal Processing Chapter

By Uri Rogers

You are invited to the upcoming lectures series sponsored by the Boise Signal Processing Chapter. The first will be on Frequency Modulated Continuous Wave Radar (FMCW) by Boise State's Dr. Bob Hay. The second will be on Automatic Language Independent Speech Processing (ALISP) by Dr. Derard Chollet, a distinguished visiting research scientist of CNRS of France.

January 23rd: FMCW Radar (Dr Hay)  
February 6th: ALISP (Dr Chollet)

Both will be at the same time and location on the different dates.

**Time:** 3-4:30pm

**Location:** Boise State University, Micron Engineering Center (MEC) Room 301.

These lecture series are open to all interested parties. IEEE membership is not required to attend.

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## Notes:

### Boise Section 50<sup>th</sup> Anniversary Celebration

By Randy Wolff

The Boise Section hosted a fun evening of celebration and storytelling on November 13, 2012. What better reason to celebrate than marking the 50<sup>th</sup> anniversary of the founding of the Boise Section in 1962. The event was hosted at Berryhill & Co. and included appetizers and a fantastic cake. Many of the section's Life Members attended, and each one took the opportunity to share a story about their career. It was fascinating to hear how much the field of Electrical Engineering has changed in the last 50+ years. Many thanks to all who attended, and especially to those who shared their stories. Here's to another 50 years, Boise Section!

### 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 Randy Wolff ([rrwolff@micron.com](mailto:rrwolff@micron.com)).

## Do We Have Your Correct E-mail?

If you haven't been receiving the newsletter or event notices electronically, check what we have for your email address on your mailing label. Please notify both the IEEE ([address-changes@ieee.org](mailto:address-changes@ieee.org) or <http://services1.ieee.org/membersvc/coa/intro.htm>) and the Boise Section Chair Randy Wolff ([rrwolff@micron.com](mailto:rrwolff@micron.com)) so we can add you to our electronic mailing list (we get address corrections only once a month from the IEEE). To assure that you get timely information about IEEE Boise events, please make sure we have your correct email address in our address database.

## Your 2012 Officers:

### IEEE Boise Section:

Chair: Randy Wolff  
[rrwolff@micron.com](mailto:rrwolff@micron.com)

Vice-Chair: Jaydip Guha  
[guhajaydip@yahoo.com](mailto:guhajaydip@yahoo.com)

Secretary: Kristen Hopper  
[kmmcnair@ieee.org](mailto:kmmcnair@ieee.org)

Treasurer: Sean Collison  
[scollison@gmail.com](mailto:scollison@gmail.com)

Membership: Duane Goodner  
[duane\\_goodner@gmail.com](mailto:duane_goodner@gmail.com)

GOLD Chair: Katie Dellaquila  
[katie.dellaquila@hp.com](mailto:katie.dellaquila@hp.com)

PACE: Manjunath Bhuyar  
[manjunath.bhuyar@ieee.org](mailto:manjunath.bhuyar@ieee.org)

Web Page: Karthik Ram  
[karthikram@ieee.org](mailto:karthikram@ieee.org)

Newsletter Editor: Jaydeb Goswami  
[jgoswami@micron.com](mailto:jgoswami@micron.com)

### Boise EDS Chapter:

Chair: Jaydip Guha  
[guhajaydip@yahoo.com](mailto:guhajaydip@yahoo.com)

### Boise PE&IA Societies Chapter:

Chair: Mark Bussert  
[mbussert@ieee.org](mailto:mbussert@ieee.org)

### Boise Computer Society Chapter:

Chair: Joe Rekiere  
[jrekiere@ieee.org](mailto:jrekiere@ieee.org)

### Student Branch at Boise State University:

Chair - Ngoc Luong

Vice Chair: Kyle Straub

Secretary: Donny Kiehn

Treasurer: Aaron Edwards  
[ieee.bsu.officers@gmail.com](mailto:ieee.bsu.officers@gmail.com)

### Region 6 Northeast Area Chair:

Elisa Barney Smith  
[EBarneySmith@boisestate.edu](mailto:EBarneySmith@boisestate.edu)



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