

# IEEE Boise Section Newsletter April 2009



# **Upcoming Events:**

#### Friday April 3<sup>rd</sup> – 2009 IEEE Workshop on Microelectronics and Electron Devices (WMED-2009)

Date/Time: April 3rd, 8:00am-6:00pm

Location: Boise Centre on The Grove, The Glens Conference Room, Boise, ID http://www.ewh.ieee.org/r6/boise/wmed2009/WMED2009.html

#### Wednesday April 8<sup>rd</sup> – Modeling Image Degradation for Improving Optical Character Recognition

Date/Time: April 8th, 7:00pm-8:00pm

Location: Boise State University, Micron Engineering Center (MEC) 106

URL: http://ewh.ieee.org/r6/boise/computer/

## **Event Details:**

## 2009 IEEE Workshop on Microelectronics and Electron Devices (WMED-2009)

#### WORKSHOP HIGHLIGHTS

- Awards for overall Best Paper and Best Poster in the workshop.
- Limited number of Student Travel Awards for Best Student Papers.
- Confirmed Invited Speakers:

Dr. Vijay Kapur, Founder and CEO, International Solar Electric Technology, Inc.

Dr. Jeffrey Welser, Director, SRC Nanoelectronics Research Initiative

Dr. Daniel Edelstein. IBM Fellow

Professor Mark Lundstrom, Purdue University

Professor Veena Misra, North Carolina State University

#### WMED-2009 WORKSHOP DESCRIPTION

The Seventh Annual Workshop on Microelectronics and Electron Devices will provide a forum for reviewing and discussing all aspects of microelectronics including processing, electrical characterization, design, and new device technologies. This workshop will consist of invited talks, contributed papers, tutorials, as well as a poster session throughout the afternoon. Faculty, students, and researchers in industry are encouraged to contribute presentations on either completed research or "work-in-progress" research.

#### IMPORTANT WORKSHOP DATES

April 03, 2009-Workshop

#### PAST INVITED SPEAKERS

Hans Stork, Applied Materials, Al Fazio, Intel Corporation, Steve Hillenius, VP, Semiconductor Research Corporation, Ilesanmi Adesida, University of Illinois, Urbana-Champaign, Jamal Deen, McMaster University, Juin J. Liou, University of Central Florida, Prashant Majhi, SEMATECH/Intel, Nety Krishna, Applied Materials, Gurtej Sandhu, Director, Advanced Technology R&D, Micron Technology, Ken MacWilliams, VP & GM Maydan Tech Center, Applied Materials, Vivek Subramanian, University of California, Berkeley, Krishna Parat, Intel Corporation, and many more.

For questions and/or comments contact Steve Groothuis skgroothuis@ieee.org.

## Modeling Image Degradation for Improving Optical Character Recognition

SPEAKER: Dr. Elisa Barney Smith, Boise State University

ABSTRACT: Clean documents are relatively easy to recognize. However, when digitizing collections of documents, the clean ones are rarely the documents that are encountered. The processes of printing and scanning documents introduce image degradations that interfere with the segmentation and recognition processes. Mathematical models of the degradation processes are presented. From these, the types of degradations that are seen can be quantitatively and qualitatively described. Included in the discussion are sampling, edge spread, corner erosion, and edge noise. The relationship between these degradations and common OCR errors is described. By considering the degradation model, a theoretical foundation is available to improve the document recognition process.

LOCATION: Boise State University, Micron Engineering Center (MEC) 106

1020 Manitou Avenue, Boise.

Free street parking or

\$1/hr parking garage across from student union building at Lincoln and University.

DATE: Wednesday, April 8, 2009.

TIME: 7:00-8:00pm

For more information: http://ewh.ieee.org/r6/boise/computer/

For questions contact Joe Rekiere <u>irekiere@ieee.org</u>

# **Chapter & Branch News:**

#### **Future News Letters Email Only**

This will be the last paper edition of the section newsletter, all future newsletters to be sent by email only. The cost of printing, sorting and sending newsletters through the US mail has become to too high. The section officers have decided that the funds spent creating a paper edition could be put to better use for its membership. With electronic access more prevalent than ever, the paper edition will cease with this edition. Hence forth, a PDF version of the newsletter will be sent quarterly. The switch to an email only newsletter will save approximately \$2400 per year.

## **News & 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 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 Mark Busset ().

## **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 or <a href="http://services1.ieee.org/membersvc/coa/intro.htm">http://services1.ieee.org/membersvc/coa/intro.htm</a> and the Boise Section Chair (<a href="mbussert@ieee.org">mbussert@ieee.org</a>) so we can add you to our electronic mailing list (we get address corrections only once a month from the IEEE). Plans often come about for events 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 for our section.

## **Volunteering – IEEE Members Get Involved**

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 2009 Officers:**

**IEEE Boise Section:** 

Chair: Mark Bussert <u>mbussert@ieee.org</u>

Vice-Chair: Dr. Elisa Barney Smith

EBarneySmith@boisestate.edu

Secretary: Chris Gunning <a href="mailto:cgunning@ieee.org">cgunning@ieee.org</a>

Treasurer: Rand Wolff <a href="mailto:rrwolff@micron.com">rrwolff@micron.com</a>

Membership: Dr. Nader Rafla nrafla@boisestate.edu

Speakers Chair: Open

GOLD Chair: Greg Gatlin ggatlin@micron.com

PACE: Dorian Kiri <u>dkiri@micron.com</u>

Web Page: Kevin Turner kevin@kmturner.com

Newsletter: Joe Rekiere jrekiere@jeee.org

Boise EDS Chapter:

Chair: Steve Groothuis skgroothuis@ieee.org

Boise PE&IA Chapter:

Acting Chair: Jared Ellsworth

JaredEllsworth@idahopower.com

**Boise Computer Society Chapter:** 

Chair: Chris Gunning cgunning@ieee.org

Student Branch at Boise State University:

Chair: Cameron Stewart <u>ieee@boisestate.edu</u>

http://www.ewh.ieee.org/r6/boise



You make a difference when you join the IEEE.

www.ieee.org

IEEE Boise Section c/o Scott Jeide 3550 N Summerside Way Meridian, ID 83646

Address Service Requested

PRSRT STD US POSTAGE PAID BOISE, ID PERMIT NO. 60