



IEEE

Cedar Rapids Section
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IEEE

Corona

Cedar Rapids Section - Institute of Electrical and Electronic Engineers
Serving Engineering Professionals in Eastern Iowa



IEEE

Visit Our Web Site: <http://www.ieee-cr-section.org>

2010 August 14

Have a Passion for Video?

The section is creating several videos featuring members talking about the personal and professional growth attained by being an IEEE volunteer.

These videos will highlight various facets of IEEE including IEEE Standards Committees, Interfacing with Government, Expert Now Modules, IEEE TV, My IEEE, IEEE Mentoring Program, Societies and Chapters, Affinity Groups like GOLD, Life Members; local, national, and international networking opportunities; among other aspects where our members have participated.

Please email tim.schoenfelder@ieee.org if interested.

Corona Address Changes

IEEE members must contact IEEE directly at:
Internet: www.ieee.org, Click: Change Contact Info.

Phone: 800.678.4333

Non-members may contact the Corona Editor at:
E-mail: Corona-Editor@ieee-cr-section.org
Mail: Cedar Rapids Section, IEEE, Attention: Corona Editor, P.O. Box 451, Marion, IA 52302
Include your full name, old and new address.

Upcoming Events

- Aug 28 Sat** NI LabVIEW Workshop
- Sept 18 Sat** Industry Formal Methods Workshop
- Oct 9 Sat** Texas Instruments eZ430 Chronos Wristwatch One Day Workshop
- Oct** Wide-Bandwidth HF Luncheon Meeting
- Nov 6 Sat** Senior Membership Rodeo

Also check the Website for Upcoming Events. Guests are always welcome.



If you are not an IEEE member, please consider IEEE membership. For information on membership and its benefits, visit the IEEE Web Site at www.ieee.org/membership

NI LabVIEW Workshop

Saturday, August 28, 2010

Kirkwood Community College

SPONSORED BY

**The IEEE Cedar Rapids Section
Women in Engineering and GOLD
Affinity Groups**

SUPPORTED BY

**Rockwell Collins, National Instruments, and
Kirkwood College**

During this seminar, you will:

- Use LabVIEW to create applications
- Understand front panels, block diagrams, icons and connector panes
- Use built-in LabVIEW functions
- Create and save programs in LabVIEW

Registration Fees (includes continental breakfast and lunch)

IEEE Members: \$15

Non-members: \$20

Students: \$10

Registration is limited so sign up today at:
<http://www.ieee-cr-section.org>

Please send payment to:

IEEE Cedar Rapids Section
LabVIEW Seminar
PO Box 451
Marion, IA 52302

Message from the Chair

2010 marks a year of adding diverse opportunities for the Cedar Rapids Section. We have founded a Communications Society and a Women in Engineering (WIE) Affinity Group. A Consultants Network is being championed. GOLD holds monthly networking meetings. Our Life Members continue to be one of the most active groups in the US. Based on member requests, we have conducted a career development workshop with a nationally renowned speaker and are poised to hold three more workshops to meet member interest and build industry contacts for a technical conference. Manas Roy elevates the MTT Chapter by inviting national speakers. Vickie Ozburn chairs ProCon – our success juggernaut which keeps improving and providing the Cedar Rapids Area with professional development opportunities. (Monthly Thursday meetings start in September – check us out.) By using RCI facilities, we opened Executive Committee meetings as well as other events to teleconferencing. (Contact one of the officers for dial up information.). Ben Loeschke plans to include at least one lunch program to vary our event time reaching more members. Murray Marple will spearhead the chance to apply for Senior Membership.

Thank you volunteers! Without you these opportunities would not be possible.

Too late to participate? No way! Join us. Share your ideas and interests. The only contribution that is too small is the one that is left undone or unspoken.

IEEE Women in Engineering (WIE)

is the largest international professional organization dedicated to promoting women engineers and scientists. It is the mission of IEEE WIE to inspire, engage, encourage, and empower IEEE women worldwide.

The Cedar Rapids Section's new WIE Affinity Group is proud to support this mission and help sponsor some of the upcoming seminars and workshops in the Cedar Rapids Section. All members are encouraged to join and participate in their local group activities to promote growth within WIE.

Please watch the Section website for more upcoming events and information. If you have any ideas for events or speakers you would like us to invite please contact Shana Fliginger (sefliginger@ieee.org) or Vickie Ozburn (vaozburn@rockwellcollins.com).

Senior Membership Rodeo Set for Saturday, November 6th

By Murray Marple

No, it does not involve old cowboys or horses; it is an opportunity for members who qualify for Senior Membership status to apply for a membership upgrade all in one day. A Rodeo is an event where we get some senior members and some computers all in one location and allow for fast processing of your Senior Membership application.

Senior member status brings peer recognition for technical and professional excellence, a Senior Member Plaque, a US\$25 coupon, a Letter of Commendation, an announcement of the membership elevation via IEEE and local media, leadership eligibility providing eligibility to hold executive IEEE volunteer positions, the ability to refer other senior member candidates, and the distinction of being able to participate on the panel to review Senior Member applications.

Senior Membership recognizes members with 10 years of practice, not years of membership; three of those years can be earned via a bachelor's degree. See attached link:

<http://www.ieee.org/web/membership/senior-members/index.html>

We are also looking for Senior Members who can review resumes, if you can help out or if you have any questions about Senior Membership or any suggestions, please contact **Murray Marple**, Membership Chair at m.t.marple@ieee.org

Alliance of IEEE Consultants' Networks (AICN) IEEE Cedar Rapids Section

The Cedar Rapids Section IEEE is creating an exclusive forum for Consultants in the area to Network.

The formation of an Cedar Rapids Section IEEE Consultant's Network affinity group will offer the forum official recognition. The forum will offer the ability to network via a group email list, roundtable meetings, discuss issues of interest to consultants, network and if appropriate work with each other.

Our Network will only be as good as your participation. Please come forward and contribute.

All you need to do is to email your contact information consisting of your email address, contact tel # and applicable business name if any to Raman Aravamudhan amudhan@ieee.org

Industry Formal Methods Workshop Saturday, September 18th

Agenda:

- **Model Checking - Dr. Michael Whalen**
This presentation describes automated analysis in software development (esp. safety-critical software) and future trends. Automation is enabled by *formalized requirements*, which precisely describe intended software and *analysis engines* that perform automated analyses.
- **Formal Methods and DO-178C - Dr. Steven Miller**
DO-178C provides guidance for airborne software certification. This talk presents the new Formal Methods Supplement to DO-178C which outlines how formal methods meet DO-178C objectives, and describes the use of formal methods on commercial and military avionics systems.
- **Interactive Theorem Proving – Dr. David Hardin**
This talk overviews interactive theorem prover (ITP) technology, highlights some popular ITPs, and discusses some practical applications.
- **Applying Formal Methods to Security - Dr. David S. Hardin**
This presentation describes practical means to improve secure system evaluation -- measured in terms of completeness, human effort required, time, and cost -- through highly automated formal methods.
- **SPARK: Practical Formal Methods for Industry - F. Britt Snodgrass**
The SPARK language is an annotated subset of Ada intended for high assurance projects. This talk overviews the SPARK programming language and its associated formal methods based static analysis toolset.

Full abstracts and biographies at the website!

Colocated with the University of Iowa [MVD'10 Midwest Verification Day](#).

Refreshments by Rockwell Collins, Inc.

Location: John Pappajohn Business Building
Room Number: S401 PPB or W151 PPB
University of Iowa, Iowa City, Iowa

Time: 1:30 PM - 5:30 PM

Price: Free Admission, register by September 14th for wireless access.

Register via upcoming events at:
<http://www.ieee-cr-section.org>

Call for Nominations (Deadline September 15th, 2010)

This is an invitation for nominations for the Section Officer positions (Vice Chair, Secretary, and Treasurer) and all Executive Committee Chairs for the 2011 term. Each member is encouraged to nominate peers with integrity, a sense of service within the guidelines of the IEEE Code of Ethics, and a strong belief in pursuit of excellence. Section members should feel free to nominate themselves.

The IEEE Cedar Rapids Executive Committee is currently serving the technical communities and professionals of the Cedar Rapids area by providing training opportunities, some of which are fully funded by the section or region, at local, domestic, and international levels. This includes organizing technical-professional conferences, activities including the plant tour opportunities at the various engineering and technical facilities around the areas, mentoring and educating those new to the section, publishing the CORONA newsletter, and much more. This is the perfect time to join the ranks of the executive committee to improve and expand the ways we serve the section.

It is our belief that there are many qualified individuals who possess the necessary leadership skills, technical proficiencies, and most importantly, willingness to serve the section. The section needs your help in identifying these individuals through nomination, or self-nomination. Please take a moment of your time to answer this call, and please make sure that your nominees would be willing to serve if elected.

You can learn more about the current Executive Committee positions, members' contact information, and our section bylaws respectively, at the following pages:

<http://www.ieee-cr-section.org/index.php/contacts/officers>
<http://www.ieee-cr-section.org/index.php/contacts/other-members>

http://www.ieee-cr-section.org/usermedia/019_CR%20Section%20Bylaws11-17-09.pdf

Please make any section operation suggestions along with the nomination.

All nominations and suggestions should be made by September 15, 2010 to the IEEE Cedar Rapids Nominations Chair, Tim Schoenfelder (tim.schoenfelder@ieee.org).

Thank you!
Tim Schoenfelder, Nomination Chair
Gary Bishop, Nomination Committee
Ayhan Sakarya, Nomination Committee
The IEEE Cedar Rapids Section & Executive Committee

Texas Instruments ez430 Chronos Wristwatch One Day Workshop Saturday, October 9th



Based on the CC430F6137 <1 GHz RF SoC, the eZ430-Chronos is a complete CC430-based development system contained in a watch. This tool features a 96 segment LCD display and provides an integrated pressure sensor and 3-axis accelerometer for motion sensitive control.

The integrated wireless feature allows the Chronos to act as a central hub for nearby wireless sensors such as pedometers and heart rate monitors. The eZ430-Chronos offers temperature and battery voltage measurement and is complete with a USB-based CC1111 wireless interface to a PC.

Attendees will receive a TI eZ430 Chronos Wristwatch with the workshop.

Agenda:

- Welcome & Overview
- Getting Started
- BREAK
- Creating Projects for Chronos
- LUNCH
- Additional Tools
- Wrap-up

Location:

Building: Jones Hall
Room Number: 142
Kirkwood Community College Main Campus
6301 Kirkwood Blvd. SW
Cedar Rapids, Iowa

Time: 8:30 – 3:30

Price: TBD

The above registration fee includes a continental breakfast, coffee, and other beverages at breaks, and a basic lunch.

NOTE: Participation is limited to the first 24 paid participants. Sign up today at:
<http://www.ieee-cr-section.org>