



Corona



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

April 2015

ProCon 2015 18th Annual IEEE Cedar Rapids Section Professional Conference

IEEE Cedar Rapids Section is going to hold its annual professional Conference on Tuesday May 19, 2015 7:30a.m. – 4:30p.m. at Cedar Rapids Marriott Hotel on 1200 Collins Rd. NE. Meet the guest speakers. Cinda Voegtli, SMIEEE, BSEE, Founder and CEO of ProjectConnections.com (on the right) who is going to talk about Strong Project Starts. How you start will make or break the project down the road.



Dr. Ginger Levin is a Senior Consultant, Author, and Educator in Project Management (on the left) who is going to talk about Embracing, Adapting, and Exploiting Change: Guidelines for Success.

Attend the conference and Learn cutting-edge leadership & project management skills from the experts. To register go to <http://www.cr-ieee-procon.org/>
To learn more about the event see the flyer on page 4.

Vinton-Shellsburg Student team wins IEEE Special Award Sponsored by Cedar Rapids Section

by Gary Bishop, Past Chair

On Saturday, Jan. 25, 2015 a competition was held at Prairie Point Middle School, Cedar Rapids, for the Future City Regional Competition. This competition is for Junior High students and incorporates many STEM activities. A team consists of a teacher, three students and an engineer/mentor. There are 38 Regions nationwide that select a winner, then each Regional winner goes on to compete in Washington DC during National Engineers Week. The national winning team gets to go to Space Camp in Huntsville, AL!

For the local competition, 47 teams competed. Our Cedar Rapids section sponsors a Special Award:

The team that has the most innovative method or technique for generating or transmitting power or providing communications. The winning team was named Aouli, and consisted of students Brianna Lundvall, Raeleigh Schulte and Caroline Lang. We provided a modest gift card and a handsome certificate to each winning student on this team.

More information about the Regional Competition can be found at: www.futurecityiowa.org

Information about the National Competition is at: www.futurecity.org

Power Transformer Design and Manufacturing Event

by Bruce Lindholm

The Cedar Rapids Chapter of the Power & Energy Society organized a 3.5 hour tutorial on large power transformers February 24. Schneider Electric and ITC sponsored the program and speaker, Ronnie Minhaz, PE, from Winnipeg, Manitoba. 45 attendees learned the fundamental requirements of system applications, design theory, manufacturing and testing of these very large units. 45 attendees filled the room at Schneider Electric, traveling from the Central Iowa and Iowa-Illinois Chapters, Cedar Falls including UNI students, Iowa City and beyond. The Cedar Rapids Section certified and awarded 3.5 PDH for 35 the attendees who requested the certificates.



IEEE Cedar Rapids Chapters

IEEE Cedar Rapids Section offers Society Chapters in many areas. We start our introduction of the Chapters and its directors. Please, consider joining the chapters.

Power and Energy Chapter

The PES chapter has been in Cedar Rapids Section a few years now. We are the engineers with a focus on high power and the Smart Grid digital world. About 45 members are part of the Chapter. We organized 2 programs in 2014: A joint meeting with UI Engineering students learning how information for the Smart Grid is developed at NISC - National Information Services Cooperative. An earlier program explained technologies developed at Schneider Electric for electric vehicle charging stations.

In 2015 we completed 2 programs in February! The first on Feb 11 jointly held with the Waterloo Technical Society. A WTS member explained his experience installing ground mounted solar arrays for his home. The second on Feb 24 is a technical program with an expert coming to town to present design and manufacturing aspects of Large Power Transformers. 3.5 PDH are available. [Register Here](#). Another program will be likely later this year, and we welcome your suggestions and any volunteers to help plan!

9 months remain in 2015, so be sure to watch for CRIEEE emails and watch the website for more events.

PES Vice-Chair Bruce Lindholm, P.E.

Bruce has 40 years experience at Square D/Schneider Electric in roles ranging from marketing, to customer projects design, and product design of electrical power equipment including low and medium voltage circuit breakers, switchgear, and substations. Contact info: brucelindholm@ieee.org



EMC Chapter

The EMC chapter has been in Cedar Rapids Section since 2013 and was organized by Dale Svetanoff. The primary motivation for opening this chapter was to set up a means for working EMC engineers and technical people to have a networking and technical platform available to help them further their careers.

EMC Chair Dale Svetanoff

Dale Svetanoff worked in telecommunications, medical and industrial electronics, RF shielding, and aerospace over his 44 year career. He was involved with EMC - related design and problem solving for more than 30 of those years. Companies included Lindgren RF Enclosures (now ETS-Lindgren) and Rockwell Collins, as well as several firms no longer in business. Dale is presently working as a Senior EMC Engineering consultant as part of his business, E-N-A Systems, LLC, located in Monticello, IA. Dale was appointed to be Chair of the IEEE EMC Society Standards Project of IEEE-Std-299-1997, as well as 299-2006. He was also an invited participant from industry in the writing of MIL-STD-188-124 and -125. In addition to his EMC-related activities, Dale is also an active seller on eBay of vintage electronic items, specializing in test and communications equipment. Dale has been a licensed Amateur Radio operator since 1962 and is currently Iowa Technical Coordinator for the ARRL, as well as the Jones County Emergency Coordinator for the Amateur Radio Emergency Service.



Young Professionals Chapter

The Young Professionals (formally GOLD) chapter is committed to helping young professionals evaluate their career goals, polish their professional image, and create the building blocks of a lifelong and diverse professional network. We are actively seeking new Young Professionals in the area that are looking to help grow our chapter.

Young Professionals Chair Kevin Tholen

Kevin Tholen is a Software Engineer at Innovative Software Engineering in Coralville, Iowa, where he focuses on Big Data applications. Additionally, Kevin spends his spare time teaching as an adjunct professor at Kirkwood Community College, and he develops software solutions for several small businesses throughout the Corridor area. Kevin has a Bachelor of Arts from Coe College, where he majored in Physics and Mathematics in addition to minoring in Computer Science. He recently graduated from the University of Iowa, obtaining a Master of Computer Science with a subtrack in Software Engineering.



We will continue IEEE Cedar Rapids Section Chapter introductions in the next edition.

- Communication Society Chapter
- Computer Society Chapter
- Eastern Iowa Consultants Network
- Electromagnetic Compatibility Society Chapter
- K-12 STEM Literacy Committee
- MTT Society Chapter
- Power & Energy Society Chapter
- Women In Engineering Society
- Young Professionals
- University of Iowa Student Branch
- University of Northern Iowa Student Branch

New EMBS Chapter Solicitation

CR Chapter officers have recently recognized that there is a significant Engineering in Medicine and Biology (EMBS) membership presence in the area. With the assistance of EMBS member Kenny Aron, a solicitation for section formation has been circulated and is in progress. At this time, more positive responses are needed. The plan is to base the chapter meetings in Iowa City, with two technical and two social meetings per year. For more information, feel free to contact Kenny at k.aron@ieee.org.

Communications Society Event

The Cedar Rapids Chapter of the Communications Society has a meeting and presentation scheduled for Tuesday April 28, 2015.

The topic is: Communication by Zero BandWidth ZBW: The approach proposed is by a new method of transmission by folks at ZBW—high-speed transmission of digital information in nearly-zero bandwidth. Come and hear enthusiastic and engaging speakers on the ZBW approach. The speakers are Prof. Sam Cowan and Mr. John D. Daniels. The meeting will be at the BEEMS Auditorium A, Cedar Rapids Public Library, 450 5th Ave. SE, Cedar Rapids, IA. Date and time is Tuesday, April 28, 2015, 5:30 - 8:30 pm. Admission is free. Come and join us for this presentation of the IEEE Cedar Rapids Communication Society Chapter. by; Lloyd Holecek, IEEE Communications Society Chapter Chair for the Cedar Rapid Section of the IEEE.

**IF YOU DIDN'T RENEW YOUR
MEMBERSHIP, PLEASE,
CONSIDER DOING SO!**

Cedar Rapids Section 2015 Officers

Chair

Raman Aravamudhan

Vice-Chair

Ashley Hochstedler

Secretary

Alex Truman

Treasurer

Robert Dawson

Upcoming Events

Webminar for Volunteers Recruitment	April 18, 2015
Excom Meeting	April 21, 2015
Communication by Zero BandWidth	April 28, 2015
UoI Seminar Prof. Kailath	April 29, 2015
Young Professionals Meeting	May 7, 2015
ProCon 2015	May 19, 2015

Our next Excom in on April 21, 2015. All are welcome. Please Contact Raman Aravamudhan to attend or visit <http://www.ieee-cr-section.org/> for more details.



The Cedar Rapids Section of the IEEE is actively seeking volunteers! If you're interested in volunteering in any capacity please contact one of the 2015 officers.

The Cedar Rapids Section is now on LinkedIn! Click to joint.

Corona is published quaterly and is an official newsletter of the IEEE Cedar Rapids Section. Newsletter website: <http://www.ieee-cr-section.org/category/corona/> Newsletter is produced by Elizabeth Kleiman.

To submit your announcement to Corona, email: Elizabeth.Kleiman.US@ieee.org Submissions for next edition are due June 15.



IEEE ProCon 2015

18th Annual IEEE Cedar Rapids Section Professional Conference

Tuesday May 19, 2015

Cedar Rapids Marriott Hotel, 1200 Collins Rd. NE

7:30 a.m. – 4:30 p.m.

Developing Professional Qualities & Skills!

Developing Project Management and Leadership skills across all types of industries whether you are a bio-medical company, an avionics company or anything in between, this training works for you!

Benefits to attending ProCon

- Learn cutting-edge leadership & project management skills from the experts
- Choose between two tracks
- Earn Professional Development Hours (PDHs)!
- Network with peers across industries

Guest Speakers

Cinda Voegtli, SMIEEE, BSEE, Founder and CEO of ProjectConnections.com



- team
- The right way to launch the core team
- Critical upfront communication and collaboration

Leading and Managing without Authority

Whose help, effort, or commitment do you need? And how do you get it when you have no authority? The answers lie in how the project manager specifically leads the team and orchestrates critical interactions at different project stages, coupled with how they leverage their personal credibility, business-savvy insights, communication skills, and more.

Managing successfully without formal authority requires utilizing both near-term tactical plans for current projects, as well as a strategy for systematically building your influence across your organization over time. This workshop provides tools and techniques to help you do both.

We will discuss real-world “managing without authority” challenges in areas such as getting decisions made and honored, getting commitments made and held, and solving

problems that require cooperation inside and outside the team

Dr. Ginger Levin is a Senior Consultant, Author, and Educator in Project Management



Embracing, Adapting, and Exploiting Change: Guidelines for Success

As project professionals our focus is to minimize change especially in scope, schedule, budget, and quality; however, change is constant in our lives and a new view of it at the portfolio, program, and project levels is required. While we must be excellent in managing

change when it occurs, we also must take a different view of it and embrace and exploit it so it leads to greater benefits and opportunities. We must change the focus from one who resists change to being a change agent recognizing the business value changes can have in our organization. This interactive workshop describes how we can refocus and implement changes in a positive manner with guidelines for success.

Changing the Culture from ‘Knowledge is Power’ to ‘Knowledge Sharing is Power’

The goal of this workshop is to describe approaches to best incorporate knowledge management into the daily lives of program and project professionals. The emphasis often is on thinking that ‘knowledge is power’, while instead the focus should be on ‘knowledge sharing is power’. Such an approach, though, represents a culture change for most people. However, we must move in this direction especially with the turnover of staff members on programs and projects, the aging workforce, and the need to be able to quickly access required information for our work as project professionals. The workshop presents a methodology to incorporate knowledge management into the program and project management life cycles.

Register at: www.cr-ieee-procon.org

Registration Rates Feb 1 – May 18

\$90 IEEE Members

\$125 Non-members/guests

Agenda

7:30 - 8:00 Registration and continental breakfast

8:00 - 11:30 Morning Sessions

11:30 - 1:00 Luncheon and Networking

1:00 - 4:30 Afternoon Sessions

Special Seminar

University of Iowa Electrical & Computer Engineering

IEEE Student Branch at University of Iowa

SPEAKER: Prof. Thomas Kailath

“The process of making breakthroughs in engineering”

Wednesday, April 29, 2015 4:00-5:00 PM

UI Shambaugh Auditorium in Main Library

Abstract: of course there is no magic formula for making breakthroughs in any field. However it is possible to glean a number of pointers from past experiences. The talk will go over some of these and illustrate them with several examples.

BIO: [Thomas Kailath](#) (Sc.D., MIT, 1961) has been at Stanford University since 1963, where he is now Hitachi America Professor of Engineering, Emeritus.

His research has ranged over several fields of engineering and mathematics, including information theory, communications, linear systems, estimation and control, signal processing, semiconductor manufacturing, probability and statistics, matrix and operator theory. He has mentored a stellar array of over a hundred doctoral and postdoctoral scholars. Their joint efforts have led to over 300 journal papers, a dozen patents, several high-technology companies and a number of books and monographs, including the major textbooks: Linear Systems (1980) and Linear Estimation (2000).

He has received many honors over the years, most recently the **US National Medal of Science** for “transformative contributions to systems science, distinctive and sustained mentoring of young scholars, and for translation of scientific ideas into entrepreneurial ventures that have had a significant impact on industry.”

Other major awards include the **IEEE Medal of Honor** as well as its Education and Signal Processing Medals; Guggenheim, Churchill and Humboldt Fellowships; honorary degrees from universities in several countries, most recently from the Technion; membership of the National Academy of Engineering, the National Academy of Sciences and the American Academy of Arts and Sciences; foreign membership of the Royal Society of London, the Royal Spanish Academy, and the four Indian National Science and Engineering Academies; the **Padma Bhushan**, India’s third highest civilian award; and the 2010 BBVA Foundation Frontiers of Knowledge Award in Information and Communication Technologies.

Students, Educators, Engineers, Entrepreneurs and Public are welcome

Individuals with disabilities are encouraged to attend all University of Iowa-sponsored events. If you have a disability that requires accommodation to participate in this program please contact the Electrical and Computer Engineering Department in advance at 335-5197.

**IEEE**

youngprofessionals

Join us for the first meeting of your local IEEE Young Professionals!

Where: Gus', 2421 Coral Ct Coralville, IA 52241

When: Thursday May 7th, from 6 - 8 PM

RSVP: <https://meetings.vtools.ieee.org/m/34244>

Come meet other young professionals in your field!

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