

Madison Section Newsletter

Vol. 18, No. 8 Serving IEEE Members of South Central Wisconsin

September 2015

Upcoming Events

- September Section Meeting "War Stories from the Cloud and 5Nines Tour"
- Madison Section Newsletter
 - <u>Upcoming Events</u>
 - September Section Meeting "War Stories from the Cloud and 5Nines Tour"
 - September Life Members Affinity Group Event "Epic Tour"
 - Section News
 - Review of August Events
 - Upcoming Meetings
 - Volunteers Needed
 - Regular Meetings
 - Section Meetings
 - IEEE-MSN-ECN Networking Meetings
 - Membership Upgrades
 - About IEEE
 - Madison IEEE Section
 - <u>Job Openings</u>
 - Sponsored Content
- WednesdayContact Us



September 16th, 2015, **11:30 AM** (Note Day and Time change!)

- Lecturer: Anton Kapella, 5Nines Vice President of Data Center and Network Services
- Location:
 - ♦♦ Downtown Madison Public Library, Room 301
 - �� 201 W Mifflin St
 - �� Madison, WI 53703
- Pizza and Beverage will be available for Free for Registered Attendees Non-member guests are always welcome.
- Please Register at the IEEE Madison Section event page

Talk:

Anton (Tony) Kapela will discuss the technical aspects of managing a data center and and extensive communications links from his unique perspective. Following the talk, there will be a tour of the 5Nines data center. Tony joined 5NINES in 2006 as an employee and was invited to become a member of the LLC in 2007. Tony provides expert level network design and architecture consultations to clients as well as manages 5NINES own wireless microwave network which covers most of Madison. In fact, this network is so solid, there has only been two brief outages in 5 years of uptime. Tony has been in the telecommunications and Internet routing field for over ten years. A frequent NANOG contributor and presenter, he's been involved with developing unique solutions to difficult networking problems. He has also been a primary researcher in the BGP security field and is responsible for the architecture and operations of the 5NINES network.

September Life Members Affinity Group Event "Epic Tour"



- Date: Saturday, September 26th, 2015
- Event: Walking Tour, Self-guided
- Location: ◆ Epic Systems Intergalactic Headquarters ◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆ Verona, Wisconsin
- Time: 11:30 AM to 1:30 PM
- Full Details will be posted in an eNotice mid-September.
- Please Register before September 17th at the IEEE Madison Section <u>event page</u>.

Event: Founded in 1979, Epic is a burgeoning electronic health records company and the largest private sector employer in Dane County with over 9,000 employees. Our event features a walking tour including a self-guided indoor tour of the Epic Central Park Campus and an outdoor stroll through Central Park back to Visitor Parking. The indoor tour visits five buildings connected by tunnels and skyways highlighting the

innovative office spaces at Epic. Each building has a theme supported by architecture and interior decorating plus art, unique seating and other unusual features. In addition, there are broad views to the outside of exterior features of the buildings and other parts of the Epic campus including major new construction. The total walking distance round-trip from Visitor Parking and back is 1.25 miles.

11:30 AM: IEEE greeting and sign-in begins at the reception area inside the Main Entrance in the Andromeda building. 11:45 AM: Announcements and pre-tour organizing followed by check-in at the Epic reception desk for the tour group(s). A tour begin shortly after all participants in the tour are checked in.

Contact: crkime@charter.net (608) 274-1402

Section News

Review of August Events

ECN Meeting at Sector67 (Review by Tim Chapman): Full-blown Unix (Linux) on a chip-pretty amazing. I've been using these ARM-based systems for a while now, but I know Tom Kaminski always has a unique perspective on all things technical so I was looking forward to his talk. Then he upped the ante with a deal on some of the systems so each attendee could walk away with a brand new complete working system for the price of the board alone. Yeah, I signed up.

Tom chose the latest and greatest of the two most popular and powerful platforms—the new quad-core Raspberry Pi 2 Model B and the BeagleBone Black Rev. C. Thanks to Chris Meyer at Sector67 we were able to set up stations with a complete working development system—with a laptop to run it—for each attendee. Interestingly, the Pi was more popular than the Black, but since several people elected to just listen there were unattended stations of each type.

Tom's talk was interesting-see there for the hand-outs. Steve Shultheis offered some additional comparisons that gave the Black a boost and, there were many questions that led to further discussions. So, perhaps not surprisingly, I didn't see much hands-on. But we've got our Linux SoCs-and I have plans for mine.

Note: There were three Beaglebone Black SoCs left after the ECN Meeting. If you are interested in purchasing one, please contact Tom Kaminski (tjkaminski@ieee.org).



Upcoming Meetings

Life Member Affinity Group Meeting: The September LMAG "event" is planned as a tour of Epic Systems in Verona. Part of the tour will be self-guided. The Epic campus is exceptional and has won accolades from many organizations. Check the IEEE-Madison Cevent page. IEEE-Madison Section: The next Section Meeting will be in September with a talk by Tony Kapela of 5Nines at the Downtown Madison Public Library and a tour of 5Nines' data/communications center at 222 West Washington Ave. Pizza and Beverage are free, but remember to sign up. Parking will be tight downtown, but we needed to have it near the 5Nines site for the tour. Consider carpooling with colleagues.

IEEE-Madison On-Line **Collabratec Community:** Charles Gervasi petitioned for and created an On-Line Community for the Madison area. **Collabratec** is the IEEE's latest innovation for members. It is an integrated online community where technology professionals can network, collaborate, and create – all in one central hub. The IEEE **Collabratec** online community offers a suite of productivity tools and is available to technology professionals around the world with exclusive features for IEEE members. Plus sign up is free to everyone. IEEE **Collabratec** can help you:

- Connect with global technology professionals by location, technical interests, or career pursuits
- Access research and collaborative authoring tools
- Establish a professional identity to showcase key accomplishments

One of the goals of **Collabratec** is to allow an interdisciplinary team to conduct private research. If you are not an IEEE member, you can sign up for **Collabratec** and join in many of the discussions, etc. You do not have access to all of the tools that IEEE Members have, but you can participate. Interested trying it out? You just need to log in with your IEEE account (typically your email address) and password and access **Collabratec** through this link. Once you are logged in, join the Madison Community.



Volunteers Needed

Micro Volunteers: Do you have some time to spare to help IEEE-Madison Section? Perhaps you have a meeting topic that you would like to see us host and could find a speaker. Maybe you have time to call a few members who might have forgotten to renew their membership.

Antenna Modeler: Do you have experience with designing and modeling antennas? The UW-Madison IEEE Student Branch project team would love to have you help them model the RDF antennas they have built.

Wisconsin Robotics: A student group on campus is looking for help with antenna ans system design of RF links for their latest robot. It will compete in the University Rover Challenge where students will control a remote rover from their home campus. See here for details.

Please consider sending some time helping with the Section activities. Let me know (tjkaminski (at) ieee.org).

Regular Meetings

Section Meetings

The third Thursday of January through May, and September through December is reserved for a meeting to provide recent research, developments, trends and/or innovations in one of our membership's technical areas.

IEEE-MSN-ECN Networking Meetings

Purpose: Presentations, Discussions, networking

Date: First Thursday of even-numbered months

■ Time: 11:45 AM to 1:00 PM

■ Location: Sector67, 2100 Winnebago Street (East Side of Madison)

• Parking: Park in lot or on Winnebago Street.

 Process: Members are encouraged to make introductions, describe endeavors, and make request for: contacts in target companies, needs, resources.

■ Contact: For assistance, call Tim Chapman 2 0 6 - 2 5 7 0

Membership Upgrades

Those interested in upgrading their IEEE membership level should send their resumes or other information showing five years of significant performance in an IEEE-designated field to Charles J Gervasi via email at cj(at)cgervasi.com. Madison Section Board will attempt to find Senior IEEE members knowledgeable in the applicant sarea of practice who may be able to provide references. You are invited to attend the informal networking portion of the monthly Section meetings (starting at 11:30am) to meet the Section Board members and discuss intentions.

About IEEE



The Institute of Electrical and Electronics Engineers or IEEE (read Eye-Triple-E) is an international non-profit, professional organization dedicated to advancing technology innovation and excellence for the betterment of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities. It has the most members of any technical professional organization in the world, with more than 300,000 members in around 150 countries. The IEEE consists of 38 societies, organized around specialized technical fields, with more than 300 local organizations that hold regular meetings. Discover what IEEE

Member Discounts can offer you. The Member Discounts portfolio consists of insurance products and programs for the home, office and travel, all at excellent group rates and reduced pricing. Visit IEEE Member Discounts to see what savailable in your location and enjoy the savings. For more information, please visit:

IEEE.ORG.

Madison IEEE Section

The IEEE-Madison Section of the IEEE is a section in Region 4 of the IEEE-USA organized to serve IEEE members in the Madison, WI area with over 600 members. The 2015 Officers and Board Members are Charles Gervasi – Chair, Steve Schultheis, Vice Chair, Tom Kaminski – Treasurer, Matthew Bartlett – Secretary, Timothy Chapman – Webmaster, Tom Kaminski – ECN Chair, Dennis Bahr – Engineering in Medicine and Biology Chapter Chair, Ann E. Thompson – Educational Activities Chair, Scott Olsen – Industrial Outreach Chair, Members at Large: Mitch Bradt, Clark Johnson, Craig Heilman, Sandy Rotter.

Job Openings

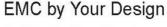
Check out <u>WIEES.com</u> for electrical engineering jobs in Madison and the surrounding region. This site is maintained as a service for electrical engineers. Jobs are displayed starting with the most recent postings first. You can filter results by location and job type. If you are hiring an electrical engineer in our area, for full-time or contract work, you can post the job in the *Contact Us* section on the WIEES.com site. Here is a sampling of the new job listings:

- RF/RFID Engineer� in Milwaukee
- Senior Electrical Engineer ABS Global near Madison

Sponsored Content

Latest EMC Book

Design Techniques for Controlling Radiated Emissions, 3rd Edition contributed to and edited by Donald L. Sweeney, including the latest digital technology, published 2014





An EMC Practical Applications Seminar and Workshop

using the most recent EMC Design Book plus take home proprietary computer program, expanded section on filter design, signal integrity, and signal return currents on PCB's and a free 45 min. individual product design evaluation



October 6-8, 2015 (Tues. - Thurs.) Hilton Hotel, Northbrook, IL

\$300 discount if you register by September 15, 2015. We are also offering a special 50% discount on the October seminar to attendees of previous D.L.S. seminars who used the 1st or 2nd edition.

Classes fill quickly so register early

email cgorowski@dlsemc.com or call 847-537-6400 www.dlsemc.com/emcdesignseminar

Contact Us

The IEEE-Madison Section has a number of volunteer positions open if you are interested in helping out. Please direct any questions or comments to Tom Kaminski (Newsletter Editor) via email to tjkaminski(at)ieee.org.

The IEEE Madison Section Newsletter Published 9 times per year (Jan-May, Sep-Dec) by the Madison, Wisconsin Section of the Institute of Electrical and Electronic Engineers (IEEE), for its members in South-Central Wisconsin. Online at http://ieee-msn.truenym.net/ For address changes: notify IEEE headquarters at: http://www.ieee.org/ or address-change@ieee.org. Editorial or comments contact: Tom Kaminski . Permission to copy without fee all or part of any material without copyright notice is granted provided the copies are not made or distributed for direct communication advantage, and title of the publication and its date appear on each copy. To copy material with a copyright notice requires specific permission. Please direct all copyright-related inquiries or requests to the IEEE Copyright Office. Thank you.

Madison Section : http://ieee-msn.truenym.net/