



The Beacon



The Newsletter of the IEEE Maine Section

October 12, 2017

www.ewh.ieee.org/r1/maine/me_ieee.html

We hope you had a great summer! The IEEE Maine Section has been running all summer. To find out more about what we've done and some of our plans for the year, read on...

Fall General Meeting

Do you have a suggestion for a fall general meeting topic? If so, please let us know. At this point our idea is to have someone from the Maine Turnpike Authority discuss their E-Z Pass System. What's your suggestion?? Please send them to ron@ronaldobrownconsulting.com

WORKING WITH OUR SECTION

Would You like to Attend a Maine Section ExCom Meeting?

Our ExCom meetings are held approximately monthly usually by teleconferences and/or WebEx, and are after work hours. You are always welcome to attend and **participate**. Your input will be appreciated and valued. To receive call-in/login information and the meeting agenda, please email ron@ronaldobrownconsulting.com

Would You like to Be a Section Officer?

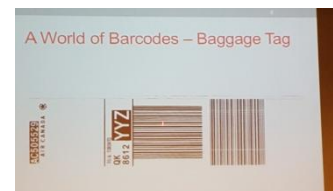
Do you want to increase your professional network, skills, visibility and have fun at the same time? The Maine Section is looking for volunteer officers for next year. All that's required is IEEE membership and an interest. Our ExCom meetings are normally held after work and last only about an hour. Since ExCom meetings are accessible online and/or by telecom, travel is no longer required. FMI to discuss a position or to suggest someone for one: ron@ronaldobrownconsulting.com or any other officer, http://www.ewh.ieee.org/r1/maine/me_officers.html.

RECENT MEETINGS

Everything You Wanted to Know about Bar Codes but Were Afraid to Ask



Dr. Richard Tervo, Professor of Electrical and Computer Engineering at the University of New Brunswick gave an IEEE Maine Communications Chapter presentation at the University of

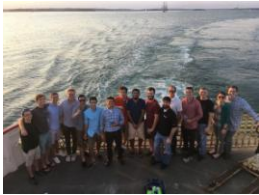


Maine's Hill Auditorium on September titled *The Hidden World of Barcodes* on Sept 22, 2017. FMI: http://www.ewh.ieee.org/r1/maine/com_c/posters/talk_092217.pdf.

PES/IAS Meeting

At the PES/IAS chapter meeting on July 20, 2017, Brian Conroy, Jonathan Gay and Robert C. Smith's presented *Accommodation of Increased DER Penetration Strategies, System Impact Study Process and Equipment Design Considerations*.

Maine IEEE YP Revitalization Meeting: August 3, 2017



The Maine IEEE YP (Young Professionals) and friends met and cruised on Casco Bay. The YP goal is to provide networking opportunities to support IEEE member professional growth in Southern Maine. A follow-on meeting is planned for the fall.

IEEE Day



October 3, 2017 was IEEE Day and the UMaine Student Chapter appropriately celebrated. There were presentations of their summer jobs by three students and Ron



Brown led a discussion of situational ethics and moral psychology's trolley problem as it applies to engineers. For example, when programming a self driving car, does one avoid hitting a person in a wheel chair but instead hits a baby carriage? A true moral dilemma but one which we as ECEs need to face.

IEEE Maine EDS/SSC Distinguished Lecturer: Prof. M.A. Alam

On August 8, 2017, the Maine IEEE EDS/SSC (Maine Chapter of the Electron Devices and Solid State Circuits Societies) hosted Purdue University's Jai N. Gupta Professor, Dr. Muhammad A. Alam who gave a lecture titled *The Emerging Challenge of and Biomimetic Solutions to Self-heating in FINFET, ETSOI, Nanosheet, & Surround gate Transistors: A Material, Device and System Perspective*. FMI:

http://www.ewh.ieee.org/r1/maine/docs/2017-08-08_Alam.pdf

IEEE Sections Congress 2017

As Maine Section Chair, Ron Brown attended the IEEE 2017 Sections Congress in Sydney Australia, August 11 to 13, 2017. There were 1250 attendees from 165 countries, 50 exhibitors, and 200 speakers. It was a great learning experience about how to provide more benefits to our members. Since the report is several pages long, those who are interested in the details please request a copy emailed to you. (ron@ronaldobrownconsulting.com) FMI about the Sections Congress: <http://sections-congress.ieee.org/>. I was told that slides and videos of the Congress will be made available. As soon as I receive the URL I will pass it on to section members.

USM Cyber Security Summit

On October 10, 2017 the daylong 2017 Partnership on Cyber Security meeting was held at USM's Abromson Center under the auspices of the Maine Cyber Security Cluster which is located at USM. Honorary co-hosts were Senators Collins and King. Keynote speakers were Bill Leigher, Director, Government Cyber Solutions, Raytheon Intelligence Information and Services; Jerry Davis, CIO, AMES Research Center, NASA; Raymond Albert, Director, Maine Cyber Security Cluster; and Matthew Barrett, Program Manager, National Institute of Standards and Technology--all leaders in their field. Beside the keynotes, there were morning and afternoon panel discussions. Three bottom lines are: Enforcement is struggling to stay abreast of the bad guys but would need your input, and be afraid, very afraid. If you have a cyber security issue, contact Homeland Security and/or the U.S. Prosecutors office in

Portland or Bangor. No problem is too small. Yours may be the tip of an iceberg. Ron Brown represented the Maine Section at the summit.

UPCOMING MEETINGS

IEEE Global Humanitarian Technology Conference

Thanks to the efforts of Dick Wilkins, the Maine Section is a sponsor of the IEEE Global Humanitarian Technology Conference (GHTC-2017) in San Jose, CA, 19–22 October 2017. Dick is serving as conference chair, and the Maine Section will receive further recognition for providing financial support. FMI: <http://sites.ieee.org/ghtc/>

IEEE Maine Communications Chapter

On Friday December 1st at 2:00PM at the University of Maine's Hill Auditorium Dr. Hongzhi Guo of the University of Southern Maine will present at talk titled: *Enabling Reliable Wireless Networks in Extreme Environments using Magnetic Induction Communications*. FMI regarding the presentation, http://www.ewh.ieee.org/r1/maine/me_ieee.html.

Dr. Guo is Assistant Professor of Electrical Engineering at the University of Southern Maine and received the Best Demo Award from IEEE International Conference on Computer Communications (INFOCOM) in 2017. In the summer of 2016, he was with Genscape Inc., Louisville, KY, as a research scientist intern.

Admission is free and the IEEE Maine Communications Chapter will provide refreshments, but please register at: tinyurl.com/mainecom or ewh.ieee.org/r1/maine/com_c/.

OUTREACH ACTIVITIES

Portland High School's Ask an Engineer Day

Ron Brown represented the IEEE at Portland High School's annual Ask an Engineer Day on September 15, 2017. The program enabled PHS students in their Project Lead the Way program to ask representatives of several engineering fields about what we do, how we do it, and why we like our professions.

Environmental and Energy Resources (E2Tech) Expo

The Section will have a presentation table at the Third Annual Environmental and Energy Resources (E2Tech) Expo on November 16, 2017 at USM. Our participation is part of the section's continuing efforts to be part of the development and application of technology in Maine.

Other Outreach Activities

Walter Rawle had meetings with MTI, E2Tech, and Central Maine Community College. MTI and E2Tech are keen to partner on events etc. E2Tech is hosting an expo on November 16 at USM and the section will have a presentation table there. Central Maine Community College is happy to host an information table in the common area of the college, focusing on transfer students interested in pursuing engineering educations. For the past couple years the Maine Section has had a table and been a presenter at CMCC's IT Professionals Day where we presented the benefits of IEEE and IEEE Computer and Communications Chapters membership. A presentation will be given to the TRIO Success Center students on November 14.

Maine Section Chair Selected for Region 1 Award

Ron Brown has been named a recipient of the **2017 IEEE Region 1 Enhancement of the IEEE or Engineering Profession's Image with the Public Award** by the Region 1 Board of Governors: *For significant contributions to creating a positive IEEE–Public relationship in Maine.*

ITEMS OF GENERAL IMPORTANCE

An Article of Interest: Technology Is Coming Sooner than you Think

The September 11, 2017 **Bloomberg BusinessWeek** has a series of 17 articles under the caption *The Sooner Than You Think Issue*. As technologists, it's a must read for IEEE members.

Does Your Company Need Technical Staff

There are a number of new Mainers in the ECE, ME, and CE fields with significant technical education and experience who are looking for work. Their credentials have been verified and they are legal to work. Ron Brown with support of Uli Stewart of MTUG and Vantage Point Recruiting have been working with Portland Adult Education to help them improve their job search skills and will vouch that they are clearly highly skilled, experienced, and have tremendous hustle. FMI to find out more about these skilled workers: ron@ronaldobrownconsulting.com or Sally Sutton at Portland Adult Education, suttos@portlandschools.org

We Want to Hear from You

Have a comment, suggestion, and yes, even criticism. Please let us know. Your input will improve the Maine Section. Contact information for Section and Chapter officers is at: http://www.ewh.ieee.org/r1/maine/me_ieee.html.

Have something for **The Beacon**? Something exciting you've done? Read an article of potential interest to our members? Attended a conference or published a paper or article? Quoted in the press? Know of something else of interest to our members? Please pass it on so it can be included in the next **Beacon**! Send it to ron@ronaldobrownconsulting.com.