

Spring is in full swing! And so are local IEEE events and meetings. Check out the events listed below and hope to see you at one of them. Note especially the Town Hall with IEEE President Tom Coughlin on April 10th.

Today in Technology History: I noted in last month's newsletter the founding of Homebrew Computer Club in Menlo Park, CA in 1975. Just over a year after, it was on April 1, 1976, that Apple Computer Company was founded by Steve Jobs, Steve Wozniak and Ronald Wayne. The original logo featured Isaac Newton sitting under an apple tree! Twelve days after the founding, Ronald Wayne sold his share of the new company to his two partners for \$800.



The Unveiling Ceremony of the **RADM Grace Murray Hopper** Plaque took place on 28 March. Attendees reminisced about Admiral Hopper and enjoyed sandwiches and cookies. The Plaque contains a portrait photo and a QR code to access additional information. The Grace Murray Hopper Park is located at the corner of South Joyce Street and 15th Street in Arlington near Pentagon City. The picture shows the IEEE members and guests at the event.



The next **Senior Member Review Panel** meeting will be in San Antonio, TX on 21 April. All references need to be submitted seven days prior. If you need help with references, reply to this email. Also note the upcoming Senior Member event of Baltimore Section in the listing below.

The inaugural **2024 World Forum on Public Safety Technology (WF-PST)** will take place May 14-15 at the Hyatt Regency Washington-Dulles Hotel. You can explore advancements in existing and emerging public safety technologies and gain insights into breakthroughs shaping the future.

Calendar of Events:

Date/Time	Title	Speaker(s)	Location
Apr 04, 2024 07:00 PM	<u>GLOBAL NAVIGATION SATELLITE SYSTEM – GPS, PART 2</u>	Richard Bova	Virtual
Apr 05, 2024 10:45 AM	<u>Low-Damping and Sizeable Spin-Orbit Torques in Vertically Graded Fe-Ni Alloys</u>	Rachel Maizel	Gaithersburg, MD
Apr 08, 2024 06:30 PM	<u>Baltimore Section Executive Committee (ExCom) Meeting, 8 April, 2024</u>		Virtual
Apr 09, 2024 06:00 PM	<u>IEEE NOVA Section EXCOM April Meeting</u>		Arlington, VA
Apr 10-11, 2024 01:00 PM	<u>IEEE-USA Congressional Visits Day</u>		Washington, DC
Apr 10, 2024 06:30 PM	<u>Town Hall with IEEE President Tom Coughlin</u>	Tom Coughlin	Alexandria, VA
Apr 17, 2024 02:00 PM	<u>Webinar: You Have Your First Job. Now, how do you start your career?</u>	Priyanka Raut	Virtual
Apr 17, 2024 06:30 PM	<u>Local IEEE meeting - Wicked Problems: How To Engineer A Better World</u>	Guru Madhavan	Vienna, VA
April 17, 2024 08:30 PM	<u>A Call to Action: Uniting Tech Innovators, Policy Leaders and Businesses to Safeguard Digital Privacy</u>	Kent Lambert	Virtual
April 18,	<u>Revolutionize Electronic Design Automation (EDA)</u>	Priyank	Virtual

2024 08:30 PM	with AI	Kashyap	
April 23, 2024 08:30 PM	Revolutionizing Supply Chain Management: Harnessing The Power Of AI And Machine Learning In Cloud-Based ERP Systems For Technical Leaders	Dileep Kumar Rai	Virtual
Apr 27, 2024 09:00 AM	IEEE Baltimore Robot Challenge - virtual component		Virtual
Apr 28, 2024 08:45 AM	IEEE Baltimore Robot Challenge - in person component		Baltimore, MD
May 06, 2024 12:00 PM	Register for IEEE Senior Member Grade Elevation Interview Sponsored by the Baltimore Section (registration opens 1 Apr)		Virtual

Date: April 4, 2024 (Thursday)

Topic: GLOBAL NAVIGATION SATELLITE SYSTEM – GPS, PART 2

Speaker: Richard Bova

Time: 7:00 PM

Place: Virtual

Registration: <https://events>.

Abstract: The pervasive presence of GPS technology has profoundly altered various aspects of our society. This talk on Global Positioning System (GPS) is the second in a two-part series, hosted by the Long Island Section's Consultants Network. Satellite navigation systems emerged at the end of the 20th century. The first was the US version known as the Global Positioning System (GPS) which greatly improved the range and accuracy of a position fix when compared to previous navigation systems. In Part 1 of this two part series, we learned how GPS works. In Part 2, we will look at various GPS applications.

In this lecture, specific uses of the system will be discussed such as GPS in agriculture, maritime port navigation and airport landing systems. Its use in cell phone navigation known as Assisted GPS will also be discussed. The lecture will end with a description of a possible Galactic Positioning System that would use a GPS-like system for navigation in interstellar space.

Speaker Bio: Richard Bova is a licensed PE and former embedded systems engineer who recently worked in the satellite communication systems industry. He has also worked as an analog/digital design engineer with hybrid integrated circuits, navigation systems and military ground support equipment. As a former adjunct and full-time professor at the DeVry College of NY, he served as the Chair of the Electrical Engineering Technology program and was a program evaluator for the Accreditation Board for Engineering and Technology. Mr. Bova holds a BSEE and MSEE from the Tandon School of Engineering at NYU (formerly Polytechnic Institute of Brooklyn) and is a Life Member of the IEEE. He is currently a volunteer workshop leader in the Osher Lifelong Learning Institute program at Stony Brook University where he leads workshops in drawing and technology related subjects.

Presented by: Society on Social Implications of Technology Chapter

Date: April 5, 2024 (Friday)

Topic: Low-Damping and Sizeable Spin-Orbit Torques in Vertically Graded Fe-Ni Alloys

Speaker: Rachel Maizel

Time: 10:45 AM

Place: NCNR (NIST Gaithersburg campus Bldg.235), 100 Bureau Drive, Gaithersburg, MD (K04B)

Registration: <https://events>.

Abstract: We are excited to announce an upcoming NIST MSED/NCNR Seminar being presented by Ms. Rachel Maizel (Virginia Polytechnic Institute). This Seminar talk is taking place in person at the NIST Center for Neutron Research and will be additionally broadcast over ZoomGov - details follow below.



Presented by: Magnetics Society Chapter

Date: April 8, 2024 (Monday)

Topic: Baltimore Section Executive Committee (ExCom) Meeting

Time: 6:30 PM

Place: Virtual

Registration: <https://events>.

Abstract: Monthly meeting of the IEEE Baltimore Section's executive committee. The meeting is open to all Section members. This meeting will be by videoconference only. The meeting link will be sent to registrants.

Presented by: Baltimore Section

Date: April 9, 2024 (Tuesday)

Topic: IEEE NOVA Section EXCOM April Meeting

Time: 6:00 PM

Place: Suite 3, Westover Library, 1644 North McKinley Road, Arlington, VA (Longfellow Room)

Registration: <https://events>.

Abstract: This is the April meeting of the IEEE Northern Virginia Section Executive Committee. All Section members are welcome.

Presented by: Northern Virginia Section

Date: April 10 - 11, 2024 (Wednesday)

Topic: IEEE-USA Congressional Visits Day

Time: 1:00 PM

Place: Washington, DC

Registration: Closed

Abstract: IEEE-USA Congressional Visits Day (CVD) is an annual event that brings engineers, scientists, mathematicians, researchers, educators, and technology executives to Washington to raise visibility of and support for engineering and technology. This premier event is open to all IEEE members in the United States. CVD is an opportunity to introduce yourself, your colleagues, your company, and your profession to our elected officials. It also a great opportunity to discuss legislation and issues that are uniquely important to IEEE members.

Presented by: IEEE-USA

Date: April 10, 2024 (Wednesday)

Topic: Town Hall with IEEE President Tom Coughlin

Speaker: Tom Coughlin

Time: 6:30 PM

Place: Martha Washington Library, 6614 Fort Hunt Rd, Alexandria, VA

Registration: <https://events>.

Abstract: Join us for a Town Hall meeting with 2024 IEEE President Tom Coughlin.

President Coughlin will speak on his priorities for 2024. We will then have a question and answer session. Bring all your questions about IEEE!

Speaker Bio: Tom Coughlin is the 2024 IEEE President & CEO. Tom Coughlin, President, Coughlin Associates is a digital storage analyst and business and technology consultant. He has more than 40 years in the data storage industry with engineering and senior management positions at several companies. An IEEE Life Fellow, Dr. Coughlin has many publications and six patents. He is also the author of Digital Storage in Consumer Electronics: The Essential Guide, which is now in its second edition with Springer. Tom is a regular storage and memory contributor for forbes.com and media and entertainment organizations. Coughlin Associates consults and publishes books and market and technology reports, including The Media and Entertainment Storage Report and an Emerging Memory Report, and puts on digital storage-oriented events. Tom has served in numerous IEEE volunteer leadership roles, including President of IEEE-USA, Director of IEEE Region 6, Vice President and Board member of the IEEE Consumer Technology Society, Chair of the Santa Clara Valley IEEE Section, and Chair of the Consultants Network of Silicon Valley. He is also active with the Storage Networking Industry Association (SNIA) and the Society of Motion Pictures and Television Engineers (SMPTE).

Presented by: Society on Social Implications of Technology Chapter

Date: April 17, 2024 (Wednesday)

Topic: Webinar: You Have Your First Job. Now, how do you start your career?

Speaker: Priyanka Raut

Time: 2:00 PM

Place: Virtual

Registration: <https://events>.

Abstract: IEEE-USA Career Webinar: You Have Your First Job. Now, how do you start your career?

Speaker Bio: Priyanka has 15 years of career counseling experience in Higher Education. As the Associate Director for University Career Services office at the University of Houston, she manages a team of six career development specialists. She led the initiative to start University Career Services operations at the University of Houston's instructional sites at Sugar Land and Katy. With her deep knowledge of the career counseling and coaching processes, coupled with 15 years of experience, Priyanka can assist students and alumni by reviewing resumes, discussing internship and job search strategies, conducting mock interviews, guiding the graduate school application process, and resolving any other career related questions or concerns. Priyanka has served in leadership positions at the National Career Development Association's (NCDA) International Student Committee and within the Assessment Committee for Division of Student Affairs (DSA) at the University of Houston for which she received an outstanding committee contribution award from DSAES. She holds graduate degrees in Clinical Psychology from the University of Pune, India and Counseling Psychology from the University of Kansas.

Presented by: IEEE-USA

Date: April 17, 2024 (Wednesday)

Topic: Local IEEE meeting - Wicked Problems: How To Engineer A Better World

Speaker: Guru Madhavan

Time: 6:30 PM

Place: Patrick Henry Library, 101 Maple Ave East, Vienna, VA (Meeting Room)

Registration: <https://events>.

Abstract: Book Talk by Guru Madhavan, National Academy of Engineering

Our world is filled with pernicious problems. How, for example, did novice pilots learn to fly without taking to the air and risking their lives? How should cities process mountains of waste without polluting the environment? Challenges that tangle personal, public, and planetary

aspects—often occurring in health care, infrastructure, business, and policy—are known as wicked problems, and they are not going away anytime soon.

In linked chapters focusing on key facets of systems engineering—efficiency, vagueness, vulnerability, safety, maintenance, and resilience—engineer Guru Madhavan illuminates how wicked problems have emerged throughout history and how best to address them in the future. He examines best-known tragedies and lesser-known tales, from the efficient design of battleships to a volcano eruption that curtailed global commerce, and how maintenance of our sanitation systems constitutes *tikkun olam*, or repair of our world. Braided throughout is the uplifting tale of Edwin Link, an unsung hero who revolutionized aviation with his flight trainer. In Link's story, Madhavan uncovers a model mindset to engage with wickedness.

An homage to society's innovators and maintainers, [*Wicked Problems*](#) offers a refreshing vision for readers of all backgrounds to build a better future and demonstrates how engineering is a cultural choice—one that requires us to restlessly find ways to transform society, but perhaps more critically, to care for the creations that already exist.

Speaker Bio: Guru Madhavan is the Norman R. Augustine Senior Scholar and senior director of programs at the National Academy of Engineering, and his books include *Applied Minds: How Engineers Think* and *Wicked Problems: How to Engineer a Better World*. Madhavan is the recipient of the 2024 IEEE SSIT Norbert Wiener Award for Social and Professional Responsibility for exceptional contribution in the field of social implications of technology.

Presented by: Society on Social Implications of Technology Chapter

Date: April 17, 2024 (Wednesday)

Topic: A Call to Action: Uniting Tech Innovators, Policy Leaders and Businesses to Safeguard Digital Privacy

Time: 8:30 PM

Place: Virtual

Registration: <https://events.vtools.ieee>.

Abstract: The presentation discusses the challenges in achieving digital privacy and the important role of technologists and policymakers while encouraging engagement from individuals and businesses.

When talking about the complexity and the importance of digital privacy, there is currently a balancing act between privacy rights and technological advancements. As technologies in digital privacy, like encryption techniques, continue to evolve, it will be essential for policymakers, businesses, and individuals to work together ensuring that personal data is protected, and privacy rights are upheld in the digital age. In building trust, collaboration among technologists, policymakers and businesses must effectively address digital privacy challenges and protect consumer rights.

To help bridge the digital privacy and communication gap between technologists and policymakers, as well as building trust among the public at large and businesses, this presentation will also include discussion on the IEEE Digital Privacy Model. The model is intended not to provide a prescription and implementation of solutions but serves as a vehicle for productive discussion on covering the broad and dynamic aspects of digital privacy issues.

Speaker Bio: Kent Lambert is an IEEE Digital Privacy Initiative volunteer. He was elected to serve in the Colorado House of Representatives January 2007-January 2011 and Colorado Senate January 2011-2019. He is chief operating officer of BlockFrame Inc. and a retired U.S. Air Force Colonel, serving 30 years, 1974-2004.

Presented by: Baltimore Section Power and Energy Society Chapter

Date: April 18, 2024 (Thursday)

Topic: Revolutionize EDA with AI: Unlocking the Power of Generative Adversarial Networks in High-Speed Receiver Modeling

Time: 8:30 PM

Place: Virtual

Registration: <https://events.vtools.ieee>.

Abstract: Join us for an exciting virtual event on "AI for Electronic Design Automation," where we will delve into the revolutionary applications of machine learning and artificial intelligence in the field of electronic design. Our featured speaker, Priyank Kashyap, a Hardware Engineering Specialist at Hewlett-Packard Enterprise, will showcase the use of generative adversarial networks in modeling high-speed receivers, addressing complex multi-physics problems like thermal analysis of PCBs and 3D-ICs, and exploring the potential of current models like LLMs in electronic design flows. This event promises to be a captivating deep dive into the cutting-edge technologies shaping the future of electronic design!

Speaker Bio: Priyank Kashyap is a Hardware Engineering Specialist at Hewlett-Packard Enterprise, with a background in machine learning and signal integrity. With a keen interest in Electronic Design Automation (EDA), hardware security, and quantum computing, Priyank has been at the forefront of innovative research in these areas. His academic achievements include winning the best paper award at DesignCon 2023, showcasing his expertise and dedication to advancing technology in the field.

Presented by: Baltimore Section Power and Energy Society Chapter

Date: April 23, 2024 (Tuesday)

Topic: Revolutionizing Supply Chain Management: Harnessing The Power Of AI and Machine Learning In Cloud-Based ERP Systems for Technical Leaders

Time: 8:30 PM

Place: Virtual

Registration: <https://events.vtools.ieee>.

Abstract: In today's rapidly changing global landscape, engineering managers are faced with unprecedented challenges in managing supply chains efficiently and effectively. The ongoing crisis has further exacerbated these complexities, putting immense pressure on manufacturing processes, inventory management, and customer service. However, there is a solution that can revolutionize supply chain management and provide engineering leaders with the tools they need to navigate through the chaos. Cloud-based Enterprise Resource Planning (ERP) systems, like Oracle, leverage the power of Artificial Intelligence and Machine Learning to generate accurate forecasts, optimize inventory levels, and streamline operations.

Join us as we delve deeper into how modern ERP systems are transforming traditional supply chain practices and helping engineering managers overcome the hurdles of the current market environment. Discover how AI-powered capabilities are driving profitability, efficiency, and competitiveness in today's ever-evolving landscape, ensuring that your organization stays ahead of the curve.

Presented by: Baltimore Section Power and Energy Society Chapter

Date: April 27, 2024 (Saturday)

Topic: IEEE Baltimore Robot Challenge - virtual component

Time: 9:00 AM

Place: Virtual

Registration: <https://events>.

Abstract: The online component of the Robot Challenge is for teams unable to attend the April 28 event at the Baltimore Museum of Industry

Presented by: Baltimore Section Life Members Affinity Group

Date: April 28, 2024 (Sunday)

Topic: IEEE Baltimore Robot Challenge - in person component

Time: 8:45 AM

Place: 1415 Key Highway, Baltimore, MD

Registration: <https://events>.

Abstract: Robot Challenge competition including time trials for robots and oral presentations by the student teams.

This is an exciting event for Middle School and High School students who have built robots from scratch. We need Judges! The interaction with working engineers is invaluable. Competition ends early afternoon, depending on the number of entries.

Please join us for an entertaining event for all who participate.

Presented by: Baltimore Section Life Members Affinity Group

Date: May 6, 2024 (Monday)

Topic: Register for IEEE Senior Member Grade Elevation Interview Sponsored by the Baltimore Section

Time: 12:00 PM

Place: Virtual

Registration: <https://events>.

Abstract: The IEEE Baltimore Section will hold its annual senior membership drive for 2024. Registration is open now through May 5th. This year the interviews will be conducted over the phone or VTC and will be scheduled at a time and date that is convenient for the member. This is an opportunity to talk with the people who will be references for your application to Senior Membership.

See the following link for Senior Membership Requirements, (Note: most members with 10 years of experience in the field meet the requirements.)

<https://www.ieee.org/>

Be sure to include your Email address and IEEE member number when registering so that we can complete the nomination process before conducting your interview. After you register, we

will contact you to schedule an interview. We will also request a copy of your resume that highlights your achievements, which will be discussed during the interview. Remember to register on or before May 5th.

Presented by: Baltimore Section

Baltimore Section : <https://site.ieee.org/>

Washington Section : <https://r2.ieee.org/washington>

Northern Virginia Section : <https://r2.ieee.org/nova/>