

# Chesapeake Area

## Scanner Newsletter for April 2025

Serving the Baltimore, Northern Virginia, and Washington  
IEEE Sections

### Today in electronic history:

(from [computerhistory.org](https://www.computerhistory.org))

March 24, 1959

## TI Demonstrates Integrated Circuit Invented by Jack Kilby

Texas Instruments demonstrates the first integrated circuit. Its inventor, Jack Kilby (b. Nov 8, 1923), created the device to prove that resistors and capacitors could exist on the same piece of semiconductor material. His circuit consisted of a sliver of germanium with five components linked by wires. It was Fairchild's Robert Noyce, however, who filed for a patent within months of Kilby and who made the IC a commercially-viable technology. Both men are credited as co-inventors of the IC.

## 1. 2025 IEEE R1 R2 Joint Student Conference

**(StuCon25)**

**April 4 @ 17:00 - April 6 @ 12:00**

The 2025 IEEE R1 R2 Student Conference (StuCon25) is co-sponsored by IEEE Regions 1 & 2 and hosted by Stony Brooks University's IEEE student branch. All college students from Regions 1 and 2 are welcome to attend this event and participate in the competitions.

Competitions include Micromouse, SumoBot, Ethics, Brown Bag, and Research Paper Competitions, with cash prizes available for all competitions.

Hand on Experience in Arduino, SumoBot, Antennas, Software Defined Radio, and MangDang Robot Dog workshops.

Professional Development workshops for students to build their professional brand and learn interviewing skills.

## **2. IEEE Communications Society ICC 2025 Conference**

The IEEE Communications Society ICC 2027 conference, which stands for "IEEE International Conference on Communications 2027", is a major annual academic conference organized by the IEEE Communications Society, focusing on the latest advancements in telecommunications and networking technologies; currently, the anticipated date for this conference is sometime between May 30 and June 3, 2027, with specific location details yet to be announced.

**If you are interested in helping with this conference, contact Dr. Paul Cotae at [pcotae@udc.edu](mailto:pcotae@udc.edu)**

**This is a good way to see how conferences are managed. This conference has been held for many years and provides an opportunity to learn about conferences, not to mention that it focuses on communication. The conference will be held in the Washington area.**

3. The IEEE Northern Virginia Section Excom Meeting is listed on the Events Calendar below. Note April 15 is the third Tuesday. Usually the meeting is held on the second Tuesday of each month.

4. The NOVA/Washington/Baltimore Section Spring Picnic is also listed on the Events Calendar. (May 24, 2025) Free food! Please register early.

**5. We welcome new Senior Members:**

## Northern Virginia Section:

Eser Akkurt

## Washington Section:

Yasaman Ardeshirpour

## Events calendar:

Date/Time	Title	Speaker(s)	Location	Primary Sponsor
Mar 29, 2025 12:00 AM	<a href="#">Social Event! IEEE Magnetics Society local Chapter joins Washington Section Networking Day at Saints Row Craft Collective in Gaithersburg, MD</a>		Gaithersburg, MD	Magnetics Society Chapter
Mar 29, 2025 11:00 AM	<a href="#">Brainy Brunch Bunch w/ DMV's WIE</a>		Washington, DC	Northern Virginia Section Affinity Group,Wie Chapter
Mar 29, 2025 12:00 PM	<a href="#">Washington Section Networking Day at Saints Row Craft Collective in Gaithersburg, MD</a>		Gaithersburg, MD	Washington Section Chapter
Apr 01, 2025 11:00 AM	<a href="#">IEEE Magnetics Society Standards Committee</a>		Gaithersburg, MD	Magnetics Society Chapter
Apr 03, 2025 05:30 PM	<a href="#">The Future of Online Learning In Higher Education &amp; 5G Open Source Tools for Innovation</a>	Zvi Galil; Tracy Van Brakle	Laurel, NY	Communications Society Chapter

Apr 04, 2025 10:45 AM	<a href="#">Exploring the Science and Application Space for the Metastable Phase in the Relaxor Ferroelectric PIN-PMN-PT</a>	Thomas Mion	Gaithersburg, MD	Magnetics Society Chapter
Apr 08, 2025 08:00 AM	<a href="#">2025 IEEE-USA Congressional Visits Day (CVD)</a>		Washington, DC	Northern Virginia Section Chapter
Apr 14, 2025 06:30 PM	<a href="#">Baltimore Section Executive Committee (ExCom) Meeting, 14 April 2025</a>			Baltimore Section Chapter
Apr 15, 2025 06:30 PM	<a href="#">IEEE NoVa ExCom - April meeting</a>		Falls Church, VA	Northern Virginia Section Chapter
Apr 19, 2025 10:30 AM	<a href="#">Washington Section April 2025 AdCom Meeting</a>		Rockville, MD	Washington Section Chapter
Apr 23, 2025 06:30 PM	<a href="#">100-300 GHz Wireless: transistors, ICs, systems</a>	Mark Rodwell		Microwave Theory and Techniques Society Chapter
May 04, 2025 08:00 AM	<a href="#">IEEE Baltimore Robot Challenge - in person component</a>		Baltimore, MD	Baltimore Section Affinity Group, Lm Chapter
May 24, 2025 10:00 AM	<a href="#">IEEE NOVA Section Spring Picnic</a>		Arlington, VA	Northern Virginia Section Chapter

**Date:** March 29, 2025 (Saturday)

**Topic:** Social Event! IEEE Magnetics Society local Chapter joins Washington Section Networking Day at Saints Row Craft Collective in Gaithersburg, MD

**Time:** 12:00 AM

**Place:** 15 Fulks Corner Ave, Gaithersburg, MD

**Registration:** <https://events.vtools.ieee.org/m/478160>

**Abstract:**

Dear DC-Area Magnetics and Enthusiasts,

Here's hoping you all are emerging from a brief winter hibernation, refreshed and ready to reconnect!

The Washington Section of the IEEE (we are incorporated under their umbrella) is hosting a social event in Gaithersburg that may be of interest to you. Let's piggyback on this event and get together for the first time in a long time, networking with our greater Washington IEEE colleagues and making new friends! Please see their registration page here: [Washington Section Networking Day at Saints Row Craft Collective in Gaithersburg, MD : vTools Events | vTools IEEE](#)

And I copy the invitation below:

Join your Washington Section colleagues at Saints Row Craft Collective for an afternoon of professional and social networking. Enjoy craft beers, coffee and wood fired pizza. You are welcome to bring a guest or your family.

Washington Section has arranged for exclusive use of the Tap Room and the patio if the weather allows. Saints Row Collective offers a rotating selection on tap and in cans including non-alcoholic options. The current selection is available here <https://www.saintsrowbeer.com/on-tap/>. In addition, their coffee bar will be open till 4PM. Currently the El Jefe Wood Fired Pizza truck is scheduled to be onsite during the event. You are also welcome to bring your own food.

Take this opportunity to enjoy some fine food and drinks with your IEEE colleagues, friends and family. Washington Section is offering discount drink (\$5 each) and pizza (\$10 each) tickets that you can purchase during online registration. Tickets will not be sold at the event. You can also make purchases onsite at regular vendor retail prices.

In your registration, please indicate the number of guests or family members that will join you. Also indicate the number of drink tickets valid for tap beer, NA beer cans or non-alcoholic tap drinks, and coffee that you would like to purchase for \$5 each. For pizza tickets please indicate the number you would like at \$10 each. Kindly pay for the total due amount during registration based on your desired number of tickets. Based on your registration payment, you will be provided drink and pizza tickets when you check in at the event. The tickets can only be used during the event.

**Presented by:** Magnetics Society

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**Date:** March 29, 2025 (Saturday)

**Topic:** Brainy Brunch Bunch w/ DMV's WIE

**Time:** 11:00 AM

**Place:** Founding Farmers DC, 1924 Pennsylvania AVE NW, Washington, DC

**Registration:** <https://events.vtools.ieee.org/m/469818>

**Abstract:**

Come sip, savor, and socialize at a fabulous **IEEE Women in Engineering Networking Brunch!** We're bringing together the **Northern Virginia, Baltimore, and Washington sections** for a morning of laughter, connections, and inspiring conversations. Whether you're a seasoned pro or just starting your journey, this is the perfect way to meet incredible women in engineering over a delicious brunch!

**When?** Saturday, March 29, 2025, at 11:00 AM

**Where?** Founding Farmers, Washington, DC

**Address:** 1924 Pennsylvania Ave NW, Washington, DC

Good food, great company, and even better conversations—don't miss out! Let's toast to empowerment and new friendships!

*(To clarify any confusion, this event was originally posted under a different title: **Brunch & Mingle with IEEE WIE!**)*

**Presented by:** Northern Virginia Section Affinity Group, WIE

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**Date:** March 29, 2025 (Saturday)

**Topic:** Washington Section Networking Day at Saints Row Craft Collective in Gaithersburg, MD

**Time:** 12:00 PM

**Place:** Saints Row Brewing, 15 Fulks Corner Ave, Suite 101-102, Gaithersburg, MD

**Registration:** <https://events.vtools.ieee.org/m/476230>

**Abstract:** Join your Washington Section colleagues at Saints Row Craft Collective for an afternoon of professional and social networking. Enjoy craft beers, coffee, and wood-fired pizza. **You are welcome to bring your family and friends.**

Washington Section has arranged for exclusive use of the Tap Room and the patio.

Saints Row Collective offers a rotating selection on tap and in cans, including non-alcoholic options. The current selection is available here <https://www.saintsrowbeer.com/on-tap/>. In addition, their coffee bar will be open till 4 p.m. Currently, the El Jefe Wood Fired Pizza truck is scheduled to be onsite during the event. You are also welcome to bring your own food.

Take this opportunity to enjoy some fine food and drinks with your IEEE colleagues, friends, and family. Washington Section is offering discounted drink (\$5 each) and pizza (\$10 each) tickets that you can purchase during online registration using PayPal. **Tickets sales at the event will be cash only.** You can also make purchases onsite at regular vendor retail prices. Purchased tickets can only be used during the event.

We look forward to seeing you on what is shaping up to be a wonderful spring day.

**Presented by:** Washington Section

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**Date:** April 1, 2025 (Tuesday)

**Topic:** IEEE Magnetics Society Standards Committee

**Time:** 11:00 AM

**Place:** Gaithersburg, MD

**Registration:** <https://events.vtools.ieee.org/m/478162>

**Abstract:** IEEE Magnetics Society Standards Committee Chair Philip Pong visits the DC/NoVA MagSoc Chapter to discuss engagement with the chapter and upcoming local event coordination, including this summer's IEEE NANO in Washington, DC.

**Presented by:** Magnetics Society

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**Date:** April 3, 2025 (Thursday)

**Topic:** The Future of Online Learning In Higher Education & 5G Open Source Tools for Innovation

**Speaker:** Zvi Galil; Tracy Van Brakle

**Time:** 5:30 PM

**Place:** B201-117, Johns Hopkins University (JHU/APL), 11091 Johns Hopkins Road, Laurel, NY

**Registration:** <https://events.vtools.ieee.org/m/477223>

**Abstract:**

**THURSDAY 03 APR, 2025 05:30 PM EST // HYBRID EVENT**

**ON-SITE VENUE**

Johns Hopkins University Applied Physics Laboratory  
(JHU/APL), 201-117, 11091 Johns Hopkins Road,  
Laurel, MD 20723 Visitor's Information

**VIRTUAL LINK RECEIVED AFTER REGISTRATION**

**Invited Talk 1 – Georgia Tech's Revolutionary Online Program and the future of online learning in higher education**

**Speaker – Prof. Zvi Galil Georgia Tech, Fellow of ACM,**

American Academy of Arts and Science and Member National Academy of Engineering

**Invited Talk 2 – 5G open-source stacks as tools for learning, innovating, and commercializing**

**Speaker – Tracy van Brakle,**

Senior Consultant with WINLAB, Rutgers University (formerly Expert Member of Technical Staff with AT&T)

**Presented by:** Communications Society

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**Date:** April 4, 2025 (Friday)

**Topic:** Exploring the Science and Application Space for the Metastable Phase in the Relaxor Ferroelectric PIN-PMN-PT

**Speaker:** Thomas Mion

**Time:** 10:45 AM

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



**Registration:** <https://events.vtools.ieee.org/m/477524>

**Abstract:** We are excited to announce an upcoming NIST MSED/NCNR Seminar being presented by Thomas Mion (US Naval Research Laboratory). This Seminar talk is taking place in person at the NIST Center for Neutron Research, K04B lecture room.

**Speaker Bio:**

**Presented by:** Magnetism Society

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**Date:** April 8, 2025 (Tuesday)

**Topic:** 2025 IEEE-USA Congressional Visits Day (CVD)

**Time:** 8:00 AM

**Place:** Washington, DC

**Registration:** <https://events.vtools.ieee.org/m/461338>

**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.

**Register Now** →

**For More Information**

Contact:

Annie Perrin Grisham  
IEEE-USA Government Relations  
Email: [a.grisham@ieee.org](mailto:a.grisham@ieee.org)

**Presented by:** Northern Virginia Section

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**Date:** April 14, 2025 (Monday)

**Topic:** Baltimore Section Executive Committee (ExCom) Meeting, 14 April 2025

**Time:** 6:30 PM

**Place:**

**Registration:** <https://events.vtools.ieee.org/m/456284>

**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.

**Presented by:** Baltimore Section

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**Date:** April 15, 2025 (Tuesday)

**Topic:** IEEE NoVa ExCom - April meeting

**Time:** 6:30 PM

**Place:** Tysons Pimmit Library, 7584 Leesburg Pike, Falls Church, VA (Room 1)

**Registration:** <https://events.vtools.ieee.org/m/475274>

**Abstract:** ExCom meeting for officers, chapter leaders, and all interested members of the section

**Presented by:** Northern Virginia Section

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**Date:** April 19, 2025 (Saturday)

**Topic:** Washington Section April 2025 AdCom Meeting

**Time:** 10:30 AM

**Place:** Rockville Memorial Library, 21 Maryland Ave, Rockville, MD (Meeting Room Medium 1st Floor)

**Registration:** <https://events.vtools.ieee.org/m/477999>

**Abstract:** Please join us for the monthly administrative meeting of the IEEE Washington Section. All IEEE members in our section are welcome to attend.

All chapter officers in the Washington Section (including joint chapters) are welcome to attend this meeting and present an update on their chapters' activities. For example, a chapter officer may give a short presentation on their chapter's plans or provide slides beforehand in case they cannot attend. IEEE members interested in volunteering are encouraged to attend, meet their section and chapter officers, and learn about exciting events planned for this year. This meeting will be slightly shorter than normal (i.e., 90 minutes compared to two hours).

Note that the AdCom meeting will be held at a new location this year at the Rockville Memorial Library in the Meeting Room on the 1st Floor. Parking is available with street meters or in the Rockville Town Square garages. Library customers can get 2 hours of free parking when they park in one of the Rockville Town Square garages. There is also parking available across the street from the library.

Light refreshments will be available during the meeting and we will plan to go out to lunch at a nearby restaurant afterwards.

**Presented by:** Washington Section

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**Date:** April 23, 2025 (Wednesday)

**Topic:** 100-300 GHz Wireless: transistors, ICs, systems

**Speaker:** Mark Rodwell

**Time:** 6:30 PM

**Place:**

**Registration:** <https://events.vtools.ieee.org/m/468178>

**Abstract:**

**100-300 GHz Wireless: transistors, ICs, systems**

**By**

**Professor Mark Rodwell, UCSB**

**IEEE-MTT Distinguished Microwave Lecturer**

We describe the opportunities, and the research challenges, presented in the development of 100-300GHz wireless communications and imaging systems. In such links, short wavelengths permit massive spatial multiplexing both for network nodes and point-point links, permitting aggregate transmission capacities approaching 1Tb/s. 100-300GHz radar imaging systems can provide thousands of image pixels and sub-degree angular resolution from small apertures, supporting foul-weather driving and aviation. Challenges include the mm-wave IC designs, the physical design of the front-end modules, the complexity of the back-end digital beamformer required for spatial multiplexing, and, for imaging, the development of system architectures requiring far fewer RF channels than the number of image pixels. We will describe transistor development, IC design, and system design, and describe our efforts to develop 140GHz massive MIMO wireless hubs, and 210GHz and 280GHz MIMO backhaul links.

This is a virtual on line lecture. Please register on IEEE-Vtools.

Professor Mark Rodwell holds the Doluca Family Endowed Chair in Electrical and Computer Engineering at UCSB and directs the SRC/DARPA Center for Converged TeraHertz Communications and Sensing. His research group develops nm and THz transistors, and high-frequency integrated circuits and systems. Prof. Rodwell received the 2010 IEEE Sarnoff Award, the 2012 Marconi Prize Paper Award, the 1997 IEEE Microwave Prize, the 2009 IEEE IPRM Conference Award, and the 1998 European Microwave Conference Microwave Prize.

More information <https://mtt.org/profile/mark-rodwell/>

**Speaker Bio:** Professor Mark Rodwell holds the Doluca Family Endowed Chair in Electrical and Computer Engineering at UCSB and directs the SRC/DARPA Center for Converged TeraHertz Communications and Sensing. His research group develops nm and THz transistors, and high-frequency integrated circuits and systems. Prof. Rodwell received the 2010 IEEE Sarnoff Award, the 2012 Marconi Prize Paper Award, the 1997 IEEE Microwave Prize, the 2009 IEEE IPRM Conference Award, and the 1998 European Microwave Conference Microwave Prize. More information <https://mtt.org/profile/mark-rodwell/>

**Presented by:** Microwave Theory and Techniques Society

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**Date:** May 4, 2025 (Sunday)

**Topic:** IEEE Baltimore Robot Challenge - in person component

**Time:** 8:00 AM

**Place:** 1415 Key Highway, Baltimore, MD

**Registration:** <https://events.vtools.ieee.org/m/474805>

**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 Affinity Group,Lm

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**Date:** May 24, 2025 (Saturday)

**Topic:** IEEE NOVA Section Spring Picnic

**Time:** 10:00 AM

**Place:** Picnic Shelter, Lubber Run Park, 200 Park St., Arlington, VA

**Registration:** <https://events.vtools.ieee.org/m/478407>

**Abstract:** Folks,

This is the annual IEEE Northern Virginia Section Spring Picnic. This is a family event so children and spouses are encouraged to join. The picnic includes members of the Baltimore and Washington Sections. WIE and Young Professionals are especially encouraged to attend.

This is a good way to meet people in IEEE at an informal setting. It is a good way for young people to meet professional engineers and see what life is like out there.

Sandwich boxes and water will be provided by the NOVA Section. Please choose the type of Sandwich Box Lunch you would prefer. Boxes should be ordered for spouses and children.

Dan Cross-Cole

Past Chair, IEEE Northern Virginia Section