Wavelengths

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Volume 65 – Issue 09

Contents

Section Chair's Message

Welcome to September! (the lyrics to the tune "Come September" composed by Bobby Darin immediately begins echoing in my brain! 😊). On the other hand, there is also the popular Rock Band – Earth, Wind & Fire, whose rendition of "September" is equally toe tapping!

There is plenty to look forward to this month by way of activities. Also, the school year begins and for sure there will be hectic university/college-based activity for a lot of you – faculty or parents or students.

This month we have *3 very interesting documentaries* scheduled. These continue to be popular and attract many non-members as well. The topics and links are in the upcoming events table.

Two pieces of important changes: we are ready to conduct elections in the next round for chapter and affinity group officer/volunteers. Please check nomination announcements!

We also congratulate Venu, Nabih Jaber, Sunil Waghmare and Abdul Salam (recent IEEE Senior Member)). See pages 20. Our next round of helping eligible members achieve senior status occurs on September 6th and repeats once again early in November.

You can find ALL the other upcoming events using the short URL link: **https://bit.ly/sem-upcoming.** To register, find the "Upcoming Events" tables and follow the vtools links.

SAVE THE DATE!

We are organizing a celebration of the youngest society's founding anniversary, namely: the **Technology Engineering Management Society** (TEMS). The scheduled date is **October 18th** and as always, we will be rotating the venue location, this time we are focusing on doing this in East Lansing, Michigan. Stay tuned for details!

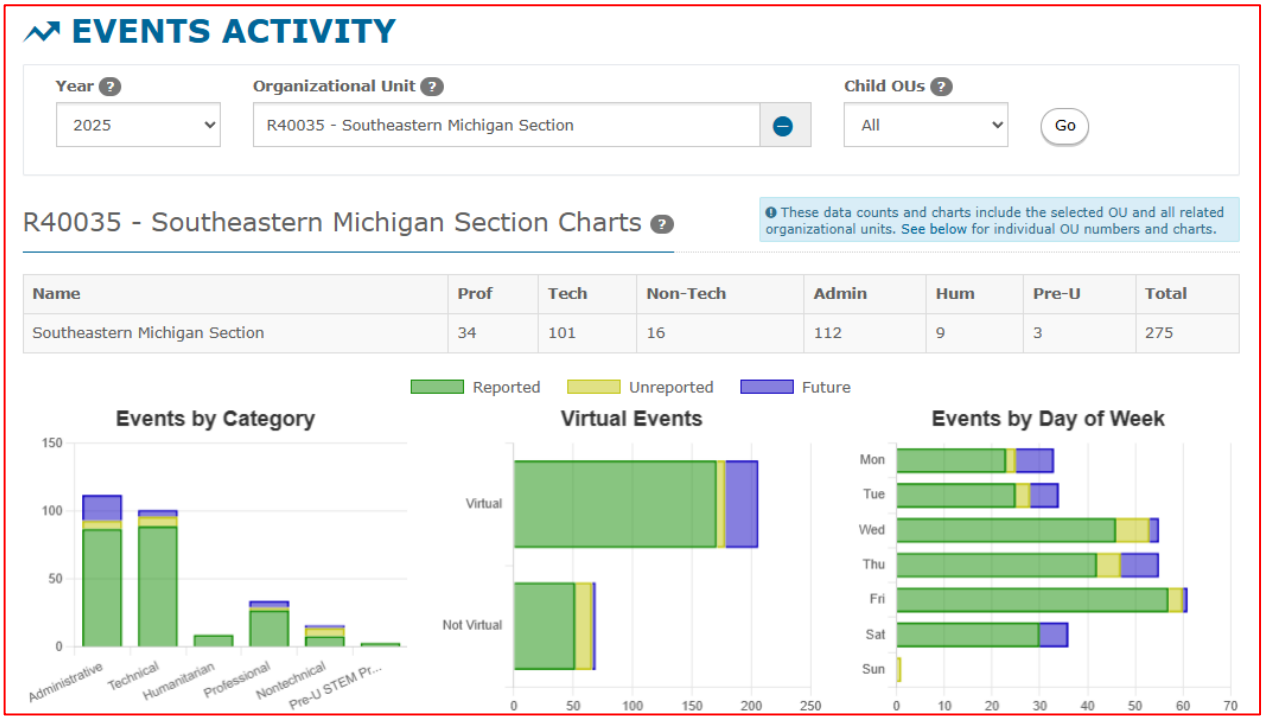
Starting this month we will report all the activities of the Student Branches and other Affinity Groups including HKN. It is sad to see so many Student Branches report "zero" (0) events or activities. We want them to be once again active and feel free to reach out to the Section – we are ***always*** ready to help! I look forward to hearing from you and seeing you at our events. As always, your ideas and suggestions are encouraged and welcome. If I don't hear back, I will assume all is well. 😊

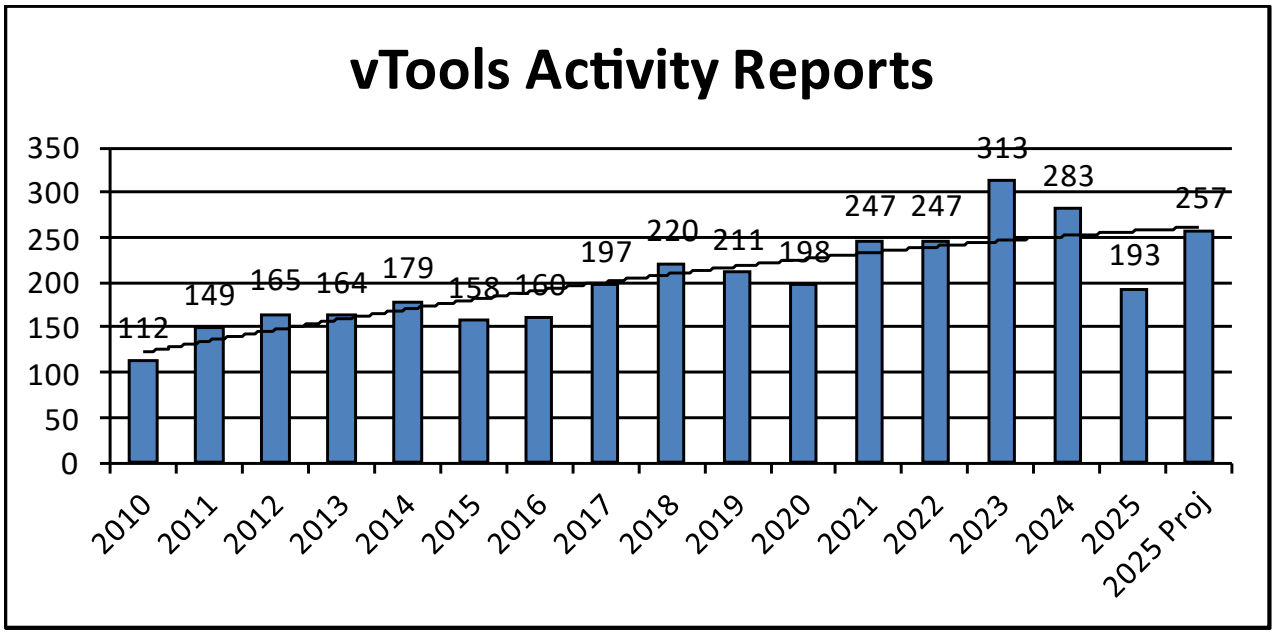
Sharan Kalwani
Via email: chair@ieee-sem.org

Section members are encouraged to engage using any of these online platforms:

To reach any of our SECTION officers, for any help/assistance you seek you may try these easy to remember email addresses. The objective is to ensure business continuity, so one need not try to remember or hunt for the contact information! They can help you find your chapter officers or point you in the right direction for any query. They are:

- Chair is chair@ieee-sem.org
- Vice Chair is vicechair@ieee-sem.org
- Treasurer is treasurer@ieee-sem.org
- Secretary is secretary@ieee-sem.org
- Advisor is advisor@ieee-sem.org





Student Branches

R40035 - Southeastern Michigan Section Breakdown Information

Name	Prof	Tech	Non-Tech	Admin	Hum	Pre-U	Total
Eastern Michigan University	0	0	0	0	0	0	0
Lawrence Technological University	0	0	0	0	0	0	0
Michigan State University	0	0	0	0	0	0	0
Oakland University	0	0	0	0	0	0	0
University of Detroit-Mercy	0	0	0	0	0	0	0
University of Michigan-Ann Arbor	2	6	4	0	0	0	12
University of Michigan-Dearborn	3	0	0	3	0	0	6
Wayne State University	0	2	0	0	0	0	2

Affinity Groups (AG) + HKN (Honors Society) Organization Units

R40035 - Southeastern Michigan Section Breakdown Information

Name	Prof	Tech	Non-Tech	Admin	Hum	Pre-U	Total
IEEE-HKN Southeastern Michigan Alumni Chapter	0	0	0	0	0	0	0
Lawrence Technological University, Theta Upsilon	0	0	0	0	0	0	0
Michigan State University, Gamma Zeta	0	0	0	0	0	0	0
Oakland University, Iota Chi	0	0	0	0	0	0	0
Southeastern Michigan Affinity Group, YP	1	4	0	10	0	0	15
Southeastern Michigan Section Affinity Group, LM	1	3	1	0	3	0	8
Southeastern Michigan Section Affinity Group, WIE	0	2	1	7	0	0	10
Southeastern Michigan Section Affinity Group,CN	3	2	0	1	0	1	7
University Of Michigan-Ann Arbor, Beta Epsilon	0	0	0	0	0	0	0
University Of Michigan-Dearborn, Theta Tau	0	0	0	0	0	0	0
University of Detroit-Mercy, Beta Sigma	0	0	0	0	0	0	0
Wayne State University, Delta Alpha	0	0	0	0	0	0	0

Upcoming Events

We have several events coming up this month, all are listed below, FYI
Note: All times are EST/EDT.
If any events are missed do kindly bring them to the attention of wavelengths@ieee-sem.org. Enjoy!
You can also use this bookmark to view
All of the links at a single glance **https://bit.ly/sem-upcoming**

Event	Date	Time (US Eastern)
Senior Member Elevation (a VIRTUAL Event!)	2025-09-06	1000 Hours
YP Affinity Group Admin Meeting	2025-09-08	1730 hours
Robotics Society Chapter Admin meeting	2025-09-08	1830 Hours
Computer Society Chapter Admin meeting (aka Chapter 5)	2025-09-08	2000 Hours
Inside the Mind of the Machine (R4 Life Members Joint meeting)	2025-09-08	2000 Hours
Electricity Safety Training (Joint Meeting with Toldeo)	2025-09-10	1745 Hours
YP Affinity Group Speaker Series Session 4: Evolution of AI	2025-09-10	1945 Hours
Chapter 8: Admin Teleconference (EMC Chapter)	2025-09-11	1100 Hours
Southeastern Michigan Section wide ExCom (in Person) monthly meeting	2025-09-11	1830 Hours
Friday Night Documentary: Prediction by the Numbers	2025-09-12	1800 Hours
A Brief History of Battery Electric Vehicles: (USA wide Joint meeting)	2025-09-17	2000 Hours
Friday Night documentary: Revolution OS (The story of Linux)	2025-09-19	1800 Hours
Nuclear Energy Revisited: AI-driven Data Center Demand	2025-09-23	1800 Hours
Friday Night Documentary: Code Rush – Story of Netscape & Open Source	2025-09-26	1800 Hours

DRIFT Announcement

The **DRiving Automotive Industry WorkForce Transformation (DRIFT)** initiative offers **free**, flexible training programs (online, hybrid, in-person) with stackable credentials and graduate certificates. Topics span AI for autonomous systems, adversarial machine learning, vehicle network security, and AI+Cybersecurity integration. Programs are designed for a range of audiences including students, engineers, IT professionals, and defense personnel.

More details are available at:
https://www.secs.oakland.edu/ei/drift/

Program Highlights:

- **Full Scholarships:** Participants receive scholarships covering all enrollment costs.
- **Flexible Online Learning Options:**
  - ✓ Fast Track Tutorial (8 hours each)
  - ✓ Workshops (16 hours each)
  - ✓ Modules (32 hours each)
- **Curriculum Covers:**
  - ✓ The fundamental architecture and key components of connected and autonomous vehicle (CAV) systems
  - ✓ The applications of artificial intelligence (AI) in CAV systems and its role in enabling core system functions
  - ✓ Common security challenges facing CAV systems, including those related to AI, and assess their potential impact on safety and performance.
  - ✓ Widely used security countermeasures and defense strategies in CAV environments.
  - ✓ Practical case studies and real-world scenarios to connect theoretical knowledge with industry applications.
- **Eligibility:** Open to U.S. citizens and permanent residents.

More can be learned by contacting (mention you heard about it here)

Huirong Fu, Ph.D.
University Distinguished Professor
Founding Director of Oakland University Center for Cybersecurity, (Designated NCAE-C by the NSA and DHS)
Founding Program Director of Master's Program of Cybersecurity
Department of Computer Science & Engineering
Oakland University, Rochester, MI 48309

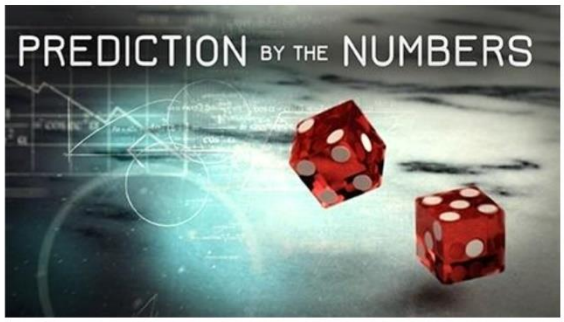
https://oakland.edu/secs/labs-and-centers/cybersecurity/

Documentary: Predictions!

IEEE Southeastern Michigan

Presents:

Prediction by the Numbers: Art of Forecasting



IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Predictions underlie nearly every aspect of our lives, from sports, politics, and medical decisions to the morning commute. With the explosion of digital technology, the internet, and "big data," the science of forecasting is flourishing. But why do some predictions succeed spectacularly while others fail abysmally? And how can we find meaningful patterns amidst chaos and uncertainty? From the glitz of casinos and TV game shows to the life-and-death stakes of storm forecasts and the flaws of opinion polls that can swing an election, "Prediction by the Numbers" explores stories of statistics in action. Yet advances in machine learning and big data models that increasingly rule our lives are also posing big, disturbing questions. How much should we trust predictions made by algorithms when we don't understand how they arrive at them? And how far ahead can we really forecast?

The documentary first aired in February 2018, running time is 53 minutes

At Glance

- **When:**
  Date: Sep 12, 2025
  Time: 06:00 – 7:30 PM (EST/EDT)
- **Where:**
  Online via Webex (to be shared only after you have a confirmed registration)
- **Audience: OPEN to ALL***

Sponsored by IEEE SE Michigan Computer Society Chapter

***Pre-Registration Required!**

https://events.vtools.ieee.org/m/499144

IEEE COMPUTER SOCIETY

IEEE Advancing Technology for Humanity

IEEE Southeastern Michigan Section

TEMS 10th Celebration

IEEE TEMS Technology & Engineering Management Society

Come join us!

Saturday Afternoon
Cocktail Reception, Section Awards,
Planetarium Light Show
1 to 5 pm
October 18th 2025

The Talbert and Leota Abrams Planetarium
755 Science Road, MSU campus
East Lansing, MI 48824

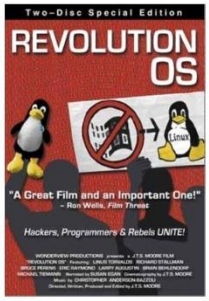
Registration Required (limited to 80 first come first served)

https://events.vtools.ieee.org/m/498955

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Movie: Revolution OS

IEEE Southeastern Michigan
Presents:
Revolution OS



IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

As part of an innovative and fresh approach, i.e. a non-traditional meeting event: we present a video documentary entitled: "REVOLUTION OS".

Movie Summary: Revolution OS is a 2001 documentary film that traces the ***thirty***-year history of GNU, Linux, open source, and the free software movement. Directed by J. T. S. Moore, the film features interviews with prominent hackers and entrepreneurs including Richard Stallman, Michael Tiemann, Linus Torvalds, Larry Augustin, Eric S. Raymond, Bruce Perens, Frank Hecker and Brian Behlendorf.

AFTER the movie - we can have a brief discussion session. NOTE: You must supply your own soda pop and popcorn! :-)

Trivia may also follow, so bring your Jeopardy hats too

At Glance

- **When:**
  Date: Sep 19, 2025
  Time: 06:00 – 7:30 PM (EST/EDT)
- **Where:**
  Online via Webex (to be shared only after you have a confirmed registration)
- **Audience: OPEN to ALL***

Sponsored by IEEE SE Michigan Computer Society Chapter

***Pre-Registration Required!**

https://events.vtools.ieee.org/m/499147

IEEE COMPUTER SOCIETY

IEEE Advancing Technology for Humanity

IEEE Southeastern Michigan Section

Tech Activities Report

As of August 29, 2025

Ch's & AG's	Ave Tech Mtg. Attend	Ave Tech Mtg Guest	#L31 -Technical	#L31 -Admin	#L31 Professional	#L31 -Other	Geo-Unit Name	# Unreported	Total Mtgs
CnsIt	30	23	1	1	3	1	Consultants Network	0	6
LIFE	9	0	2	0	0	3	Life Members	0	5
WIE	48	28	2	7	0	0	Women In Engineering	0	9
YP	7	0	2	6	1	0	Young Professionals	0	9
1	0	0	0	1	0	0	Circuits & Systems, Signal Proc., Info Th.	0	1
2	17	1	2	7	0	0	Vehicular Technology	2	9
3	16	10	2	6	1	0	Aerospace & Elec. Sys., Communications	0	9
4	22	9	4	7	1	0	Trident (Ant, Elect Dev., uWave, Photo)	0	12
5	63	35	20	7	11	3	Computers	0	41
6	30	7	6	0	0	0	Geoscience & Remote Sensing	0	6
7	0	0	0	5	0	1	Power Engineering, Industrial App.	0	6
8	50	30	9	6	0	0	Electromagnetic Compatibility (EMC)	0	15
9	79	5	1	2	0	0	Power Electronics, Industrial Electronics	0	3
10	16	10	1	4	0	0	Engineering Management	1	5
11	14	2	3	0	0	0	Eng. in Medicine & Biology	0	3
12	21	0	1	0	0	0	Control Systems	0	1
13	14	1	5	0	1	1	Education	0	7
14	352	340	2	2	0	0	Robotics & Automation	2	4
15	21	12	2	0	0	0	Nuclear Plasma Science Society	0	2
16	702	680	1	0	0	0	Computational Intelligence / Sys.Man.Cyber.	0	1
17	22	9	1	1	1	0	Nano Technology Council	0	3
18	20	8	1	0	0	0	Magnetics Society	0	1
									0
SEM	44	24	5	22	5	3	SEM (Section)	4	35
Tot	1594	###	73	84	24	12	NOTE: Highlight Green = Active	9	193
		77%					NOTE: Highlight clear = Concern		

SEM Section Chapter and Affinity group leaders who are not showing any technical or administrative meetings are encouraged to conduct meetings of your leadership ASAP. The TAcom will be contacting the following Geo-Units next month: Chapters 1, 7, 9, 10, 12, 16, 17, and 18 to help you establish a projected plan of event for the remainder of the year as well as to provide any other assistance needed.

Thanks to all Geo Units working to engage their membership (e.g., Women in Engineering, Young Professionals).

Jeff Mosley, TAcom Chair, CIS CH 16 Chair (SEM Section, Region 4)

New Officers: Suggestions

There are several actions that can & should be taken by officers when taking command of their organization. While one alone will not guarantee eventual success, leaving one out can seriously inhibit the long-term success of any team. The suggestions given here are my own understanding of what has worked well in the past. The specific sequence can be varied, so don't be concerned as long as all, or most, eventually come about.

1st: Establish regular and consistent Officer meeting days and times.

- This should first be applied to your organization's administrative committee (Chair / Vice-Chair / Secretary / Treasurer) if this is a traditional IEEE Geo-unit. If the organization is a standing committee, the titles will be more diverse.
- My personal experience has been that a first time 'face-to-face' meeting helps establish a rapport among the members. This is more effective when combined with refreshments or a meal.
  (*There is a reason why every culture on our planet greets newcomers with offers of something to eat and or drink, or both*.)
- Follow that first meeting with virtual meetings to minimize member travel and time but schedule other face-to-face gatherings at least 3 or 4 times each year to maintain the interpersonal gestalt established in the first event.
- Hold a 'non-working' social meeting near the end of the year to celebrate the successes and achievements of your team. This is the team's 'thank you' for a job well done.

2nd: Set up a communications method to remain 'in contact' with your general membership.

- Introduce your Officers and Volunteers to your general membership.
- Ask your members for their ideas on what activities and presentations they would like to see.
- Keep them informed about activities as they are planned.
- Seek additional officers and volunteers from among your members. An active meeting schedule may require more hands than just your four elected officers.
- Communications methods may include: Geo-unit website, eNotice, group meetings (ZOOM), picnic's, local site visit outings, etc.. Use your imagination. If one doesn't work, try something else.

3rd: Maintain contact with your Section Executive committee.

- Attend as many of the Executive Committee meetings as possible.
- Have your entire Administrative Committee attend and / or rotate that function among your officers and volunteers.
- Report on your Geo-unit activities to the Executive Committee, and…
- Document your activities with photos and articles contributed to the monthly Wavelengths newsletter.

4th: Use the 'v'Tools to plan and document all your activities.

- vTools Survey tools
- vTools Engage, vTools eNotice
- vTools Events, vTools Local Groups
- vTools Officer Reporting, vTools Student Branch Reporting
- vTools Voting

5th: Establish contact with the other Geo-units in your Section.

- Cooperate with them to expand the opportunities for both your, and their, membership.
- Share the work and costs of organizing a major event.
- Increase attendance at events with both memberships
- Share information about both Geo-units for the benefit of both memberships.
- Have more fun!

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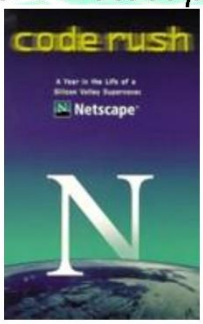
Movie: Code Rush!

IEEE Southeastern Michigan
Presents:

Code Rush: Netscape & the Open Source movement



IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

As part of an innovative and fresh approach, i.e. a non-traditional meeting event: we will present a video documentary entitled: "CODE RUSH"

Summary: Code Rush is a 2000 documentary following the lives of a group of Netscape engineers in Silicon Valley. It covers Netscape's last year as an independent company, from their announcement of the Mozilla open-source project until their acquisition by AOL. It particularly focuses on the last-minute rush to make the Mozilla source code ready for release by the deadline of March 31, 1998, and the impact on the engineers' lives and families as they attempt to save the company from ruin.

At Glance

- **When:**
  Date: Sep 26, 2025
  Time: 06:00 – 7:30 PM (EST/EDT)
- **Where:**
  Online via Webex (to be shared only after you have a confirmed registration)
- **Audience: OPEN to ALL***

Sponsored by IEEE SE Michigan Computer Society Chapter

***Pre-Registration Required!**

https://events.vtools.ieee.org/m/499149

IEEE COMPUTER SOCIETY

IEEE Advancing Technology for Humanity

IEEE Southeastern Michigan Section

This Month in September

Or: Notable Events in Engineering & Science History, which I Did Not Know! ☺

Ernst Weber; Born 6 Sep 1901; Died 15 Feb 1996 at age 94.

Austrian-American electrical engineer who contributed to the development of microwave technology, applied in radar and communications systems. During WW 2, he led researchers solving the problems of accurately measuring very high frequency microwaves, essential for the calibration of radar. (This involved learning how to coat glass tubes with a very thin layer of conducting metal, which Weber derived from the ancient skill of decorating chinaware with gold and silver, followed by success using a mixture of platinum and palladium.). The team created other designs and production techniques that helped the overall development of radar during the war. His expertise later guided the growth of the Polytechnic Institute in New York City.

David Packard; Born 7 Sep 1912; Died 26 Mar 1996 at age 83.

American entrepreneur and electrical engineer who co-founded the Hewlett-Packard Co., a leading manufacturer of computers, computer printers, and analytic and measuring equipment. In 1939, he formed a partnership known as Hewlett-Packard Company with William R. Hewlett, a friend and Stanford classmate. HP's first product was a resistance-capacitance audio oscillator based on a design developed by Hewlett when he was in graduate school. The company began with $538 in initial capital, and its first production facility was a small garage in Palo Alto.

Harvey Fletcher; Born 11 Sep 1884; Died 23 Jul 1981 at age 96.

American acoustical engineer who was the first to demonstrate stereophonic sound (1934). He was a trail blazing investigator of the nature of speech and hearing, noted for his contributions in acoustics, electrical engineering, speech, medicine, music, atomic physics, sound pictures, and education. He guided the development of the Western Electric Hearing Aid, the first such device to use vacuum tubes. He developed a group survey method using recorded sound of decreasing volume which has wide acceptance in schools throughout the nation.

Alexander Meissner; Born 14 Sep 1883; Died 3 Jan 1958 at age 74.

Austrian engineer whose work in antenna design, amplification, and detection advanced the development of radio telegraphy. In 1907 he joined the Telefunken Company of Berlin, where he conducted research on radio problems. He improved the design of antennas for transmitting at long wavelengths, devised new vacuum-tube circuits and amplification systems, and developed the heterodyne principle for radio reception. In 1911 Meissner designed the first rotary radio beacon to aid in the navigation of the Zeppelin airships. In 1913 he was the first to amplify high-frequency radio signals by using feedback in a vacuum triode; this principle made it possible to build radio receivers more sensitive than any earlier type.

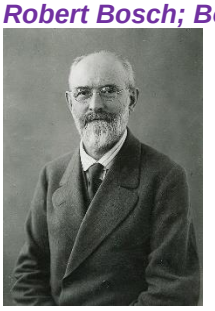
Garrison Villard; Born 17 Sep 1916; died 7 Jan 2004 at age 87.

American electronics engineer who developed over-the-horizon radar (a way to detect objects out of direct sight by bouncing radar off the ionosphere, an electrically charged layer in the upper atmosphere) so radar could peer around the Earth's curvature to detect aircraft and missiles thousands of miles away. His interest in electricity began with a copy of Harper's Electricity Book for Boys. At age 12, he put together a radio from a kit. During WW 2, he researched countermeasures to protect Allied forces against enemy radio and radar devices. He made pioneering studies of radar jamming. In 1947, he designed a simplified voice transmitter permitting two-way communication on a single radio channel, such as a telephone conversation.

William Playfair; Born 22 Sep 1759; died 11 Feb 1823 at age 63.

Scottish engineer and economist who pioneered the graphical representation of statistics, creating the line graph, bar graph and pie chart, though his name is little known. His inventions and patents included metal-working machines, the mass-production of silver-plated spoons, improvements to agricultural implements, and modification of the bows to ships to improve speed. He had gained experience as apprentice to Andrew Meikle (inventor of the threshing machine) and working with James Watt and Matthew Boulton (manufacturers of steam engines). Playfair's book Commercial and Political Atlas (1786), which introduced his graphical display methods, was the first major work to use statistical graphs.

Robert Bosch; Born 23 Sep 1861; died 9 Mar 1942 at age 80.



German engineer and industrialist who was responsible for the invention of the spark plug and magneto for automobiles and whose firm produced a wide range of precision machines and electrical equipment in plants throughout the world.

Seymour R. Cray; Born 28 Sep 1925; died 5 Oct 1996 at age 71.

American electronics engineer who pioneered the use of transistors in computers and later developed massive supercomputers to run business and government information networks. He was the preeminent designer of the large, high-speed computers known as supercomputers. { Editor's Note: *"I actually met him on the second day of after getting hired at Cray Research Inc in Minnesota – September 1988*" }

This continues the yearlong feature of interesting ***engineering*** events or milestones that occurred in a specific month. Readers are invited to share their views and opinions (or suggestions) at the accompanying link. Submissions can also be made using direct email to the editors at: wavelengths@ieee-sem.org.

Past readers have asked to feature one or more of these events in more detail. So, starting in January 2024, we have been featuring both documentaries and black & white movies, that will help shed more light on these luminaries and also explore the hidden side of their life stories. We will also endeavor to republish an article from various publications in the same month of Wavelengths.

I urge any and all faculty of the STEM departments to share this with their students!

Also, like previous months, where we screened online scheduled documentaries featuring several of the folks mentioned in this column, we will repeat them ALL in 2025, as part of a growing series. Enjoy!

Sharan Kalwani
2022-2025 Chair, Southeastern Michigan Section,
Passionate Teacher/Engineering History Buff and Technology Aficionado

IEEE-USA Request

Contacting US Representatives
Your Government Representatives need to hear from you!

IEEE Members:

I have spoken with many of you over the past months and many have asked "But, … what can I do about all the 'stuff' that is going on in Washington?"

As a citizen in the USA, it is your right, and indeed your duty, to let your elected representatives know what you think and believe they should be doing about your concerns and issues. In a representative form of government, your elected officers need to know what you think. Doing their job effectively depends on knowing what the people they represent want them to do.

A representative government is a control system that depends on feedback from the people it governs. Without your 'feedback' the system is running 'Open Loop', and can go 'off the rails' completely out of control.

IEEE USA has created a site to enable easy and rapid access to your government representatives. See below:
****
Go to the IEEE USA website at: **https://ieeeusa.org/** and click on the

button.

Then:
Fill in the prepared email form or modify it to suit your needs and send it off, or:....

If you would prefer to phone your representative to share your views, you can find their phone numbers on that same page, using the

buttons.

For the **Senate**, you are offered contact information for your two Senators.

For the **House**, you need to select your state and then know your District # to find your Representative.

...OR:
Click on the '**Sending to:**' button at the bottom of the email form just under the **'Customize email'** button, and the system will automatically send the message to your Representative and your two Senators.

Remember, if you don't tell your representatives what you think, you have no right to complain when they don't follow your wishes.

30

Elections Proposal

(BEARS REPEATING)

Ever since the Section was first established in the early 1960s, when it had just 5 chapters, it has grown considerably since then. Today we stand at 18 chapters (many of them joint, so we are really more than just 18 societies represented here!), 4 Affinity Groups and 8 Student Branches. Not to mention a few HKN units and a couple of student society chapters.

The real challenge has been recovering from the pandemic and loss of momentum, however what has made it difficult is the actual conduct of the annual elections and the transitions between elections of elected volunteer officers. Since there are so many chapters and for each – there are 4 volunteers (chair, vice chair, secretary and treasurer), when you do the math: it exceeds 88 positions! So, the election committee has to make the call for elections, help finalize the ballots, conduct the elections (so many to choose from!), tabulate the results, announce it and update the roster, etc. All of which consumes great deal of energy and bandwidth!

Also often many of the volunteer elected officers are new to the roles and struggle to find their rhythm, not to mention loss of continuity and in some cases no proper hand over of history, records and activities from the past administration. All of this makes the case for streamlining things and saving both time and energy for the section, chapters and affinity groups. Members will also be better served when there is continuity and growth in the roles as well.

We looked around and found out that some chapters conduct an annual election ONLY for the Secretary. Then each year the secretary moves up to the next roles in the chapter e.g. the treasurer, the following year they take on the mantle of the vice chair and finally graduate to the position of chair. This has multiple benefits:

- ✓ Fewer election ballots to scrutinize
- ✓ Easier to cast a vote for the best candidate
- ✓ Shorter election cycle
- ✓ Quicker turnaround of results
- ✓ Rapid assumption of duties for that role
- ✓ Vastly improved continuity of service to the membership – as only an incremental change occurs
- ✓ Opportunity to gain experience in various positions and knowledge in those roles
- ✓ Mentoring of the newly elected position by the existing volunteers, thus smoothing the learning curve.

Given the obvious advantages, the Section will try and deploy this method for the election cycle of 2026. However, it is not mandatory and each Chapter Administration can choose the traditional method or adopt this new style. This has been shared at the June 2025 Section ExCom meeting with all those present and is repeated here in Wavelengths for the benefit of the entire member community. Of course, we expect that there may be queries- and would be happy to answer them and post them to the website as well.

NOTE – This is up to each OU to choose – but do this ASAP after internal discussion with your fellow chapter officers!

You can contact the Section ExCom using any of the email info below:

- 🕮 Chair is chair@ieee-sem.org
- 🕮 Vice Chair is vicechair@ieee-sem.org
- 🕮 Treasurer is treasurer@ieee-sem.org
- 🕮 Secretary is secretary@ieee-sem.org
- 🕮 Advisor is advisor@ieee-sem.org

Further input/clarification:

IEEE Elections 2025:

In years past, the Executive Committee, and its Standing Committees of Southeastern Michigan Section have conducted ALL the elections for each of our Geo-units (Chapters, Affinity Groups, and the primary Section Executive Committee officers).

Election Options:

As Sharan Kalwani, our Section Chair explained at the July Executive Committee meeting, we are offering an alternative to the traditional ‘elect all officers at once’ system.

The option is to elect just the Secretary, who will hold their office for 1 year, then move to the Treasurer's position. Next year to the Vice-Chair and in the fourth year, to the Chair.

The advantage of this system is that most officers will have the team experience to guide them, and only the Secretary will be in intensive training, each year. The result should be that all team members over time should be fully aware of their duties, and what to expect from each of the rest of the team. This should (may) eliminate situations where the Chair tries to do everything alone and leaves the rest of the team wondering why they even ran for office.

Each Chapter and Affinity Group**:**

- Decide whether to elect just their Secretary (Oher officers shift up one position.)
- Or… Elect a full slate of officers
- Let the Section Chair know your selection before the August 14th ExCom meeting.
- (Any Geo-unit not stating their preference will be given the elect the Secretary only option.)

2025 Election Planning:

- Nominations for office: August 15 – September 30
- Ballot Construction: October 1 – October 6
- Elections for all offices, all Geo-units: October 7 – October 31
- Resolution and confirmation of election results: November 1 - November 30
- Preparation of election results report for ExCom meeting on December 11.

IEEE Elections 2025-26:

Election Operations:

Each Chapter and Affinity Group:

- Decided whether to elect just their Secretary (Oher officers shift up one position.)
- Or… Elect a full slate of officers

The chart below shows the final arrangement. It is interesting to note that, we have almost a perfect 50:50 spilt decision which should give us helpful data as to how well each approach will affect the resulting officer mix during the next 4 to 5 years of the experiment.

Ch #s	SEM Geo-units: All	New ElectSys	Trad. Elect Sys	On Own
0	R40035 - SEM Executive Committee		1	
1	CH04049 - SEM Jt.Chap,SP01/CAS04/IT12	1		
2	CH04051 - SEM Chapter, VT06	1		
3	CH04053 - SEM AES10/COM19		1	
4	CH04050 - SEM Chap, AP03/ED15/MTT17/PHO36	1		
5	CH04055 - SEM Chapter, C16 - Computers	1		
6	CH04056 - SEM Chapter, GRS29	1		
7	CH04057 - SEM Chapter, PE31/IA34		1	
8	CH04088 - SEM Chapter, EMC27		1	
9	CH04087 - SEM Chapter, IE13/PEL35	1		
10	CH04142 - SEM, Chapter TEM14	1		
11	CH04099 - SEM Chapter, EMB18	1		
12	CH04103 - SEM (Chap 12),CS23		1	
13	CH04113 - SEM Chapter, E25	1		
14	CH04115 - SEM Chapter, RA24		1	
15	CH04144 - SEM Chapter, NPS05		1	
16	CH04125 - SEM Chapter, CIS11/SMC28		1	
17	CH04128 - SEM Chapter, NANO42	1		
18	CH04162 - SEM Chapter Magnetics, MAG33			1
AG-Consult	CN40035 - SEM Consultants Network	1		
AG-Life	LM40035 - SEM Life Members		1	
AG-WIE	WE40035 - SEM Women in Engineering (WIE}		1	
AG-YP	YP40035 - SEM Young Professionals		1	

(Chapter 17 has decided to conduct its own election this year.)

Member Alert:
Our members should notice that many of our Chapters are composed of more than one Society. These 'Joint' Chapters such as #1, 3, 4, 7, 9 and 16 may be unfamiliar to members with only one Society membership and they may be confused when asked to vote for an organization they do not know and are unfamiliar with the candidates.

You will only receive nomination requests and election ballots that align with your Society or Affinity Group memberships. If you are not a member of any Geo-unit, you will only receive requests that refer to the Section Executive Committee election, which will be sent to ALL SEM members. To check on your membership, open the vTools 'Member Validation' tool, enter either your IEEE member #, or the email account used to register with IEEE and YOU'RE list of Societies.

Caution:
If you have modified your IEEE Personal Profile to 'Opt Out' of receiving 'Local' news and information you will not be able to receive the eNotice of nominations, nor the Ballots for officer elections. You may easily check that status by logging into IEEE.ORG and Signing In with you IEEE username and password. When your name appears in the top black navigation bar, click on your name and it will open your Personal Profile. Then click on 'Communication Preferences'.

The window that opens suggests three options: (Click on '…Your Election Communications…'.)
- Select Your Communication Preferences
- Select Your Election Communication Preferences
- Review Your Accepted Polices & Terms

Clicking on "Your Election Communication Preferences and will move you down to that section. To receive local election notices, select the top option: "I want to receive email notification about voting online."
****

Officer Training Sessions:

As in previous years we will offer training sessions covering the functions, duties, responsibilities and tools associated with officer positions for all officers in our Section.

Note: These training sessions are also 'Open' to all members who wish to understand how the IEEE is organized and governed and how your Section is administered by the officers you elect each year. This is also a great way to begin learning some of the 'soft skills' that go beyond the technological topics you were trained on during your formal education as an engineer or scientist and give you some of the tools that can make a significant difference between holding down a job and building a career.

Management skills are not only for managers! Every engineer during his/her growth in their chosen profession will need to write formal letters or recommendations or reports and give presentations to industry groups, or boards of directors, or conduct classes for associates and customers, lead a project team, conduct meetings, write up agendas and minutes, etc. etc..

Those skills are not learned by reading about them but are 'learned by doing' and a great place to have that learning experience is by participating in managing a Chapter or Affinity Group.

Consider offering your time to such a team by nominating yourself for an office in one of the many Geo-units in our Section.

I strongly urge all officers, both experienced and new, to attend these training sessions to refresh your understanding of what you are supposed to be doing for your members as a functioning leader within and IEEE Geo-unit. We have noted, with dismay, that some officers seem to believe that their only duty and function is the 'warm the chair'. (See the Geo-Unit Health chart in this month's Wavelengths newsletter and notice the Chapters that are not highlighted in green!)

Don't become one of those!

Kimball Williams

Committee Setup Proposal

(BEARS REPEATING)

As mentioned earlier, we are a large Section with a member community size of nearly 3000 folks (give or take a few as this fluctuates each month) stand at 18 chapters (many of them joint organization units (OU), so we are more than just 18 societies represented here!), plus 4 Affinity Groups and 8 Student Branches. Not to mention a few HKN units and a couple of student society chapters. A ***large*** section is defined by the IEEE MGA as having over 1500 members. FYI a ***medium*** section is usually between 500~1500 members and a ***small*** section is thus less than 500 members. In Region 4 (aka Central Region), we are the 2nd largest Section and definitely the most active in terms of technical activities executed for our community.

In order to provide services to our members – we have several committees – at last count 14 of them and clearly with different functions. Over the years we have noted the exponential growth of communications, informational flow and steadily increasing demands with regards to smooth and timely functioning of the various committees. To speed things up and taking a cue from natural observations, learning, etc., we propose to consolidate a few committees so that instead of 14 we will have now 10 committees. A few of the existing committee functions actually overlaps with direct focus of existing peer committees. So, by merging some of them, this will help improve things overall. Here is what it looks like today:

Current Committees	
Acronym	**Full Name of Standing Committee**
ARCom	Awards and Recognitions
AACom	Affiliations Committee (non-IEEE orgnizations)
ConCOm	Conferences
EduCom	Education (and outreach eg STEM)
FinCom	Section Finance
MentCom	Mentor Committee
MDCom	Membership Development
NewsCom	Newsletter and Publications
NSLCom	Neighbhoring Sections Liaison
PACE	Professional Activities Committee for Engineers
SACom	Student Activities
TACom	Technical Activities
WebCom	Website and Social Media

And we propose to merge the WebCom and NewsCom into the Communications Committee, since the functions are definitely common. In addition, we noticed that the AACom and NSLCom have nearly identical duties and thus they also fall within the larger scope of the Communications Committee. One other committee that deals with the students is the MentCom, which has unfortunately been beyond dormant for the last 5 years, so we will merge that role within the SACom. So here is what the new structure will potentially look like:

New Committees	
Acronym	**Full Name of Standing Committee**
ARCom	Awards and Recognitions
ComCom	Communications (Web, Social Media, Newsletter and Nearby Sections Liaison)
ConCOm	Conferences
EduCom	Education (and outreach eg STEM)
FinCom	Section Finance
MDCom	Membership Development
PACE	Professional Activities Committee for Engineers
SACom	Student Activities (includes Mentors)
TACom	Technical Activities

In addition we recommend that each committee have two visible key positions: namely Chair and Secretary. Members of the committee can be appointed as and when a specific function needs to be performed with a specific named designation.

Post Office: Digital Times!

Denmark ending letter deliveries is a sign of the digital times
Adrienne Murray - Business reporter, in Copenhagen BBC

Denmark's red post boxes are being removed across the country

Sorting through bundles of letters, small packages and magazines, Herman Moyano is getting ready for his early morning post round. Cargo bikes and vans stream out from the depot, just north of Copenhagen, as Herman departs on his scooter. For the past seven years he's been delivering mail for Denmark's national postal service PostNord.

> *"I used to think that all the people are waiting for something, a special letter, a special communication, a special package," he says.However, Herman has noticed the loads getting lighter, and rather than letters, these days it's mostly bills and bank statements. "I have seen the mail going down gradually. But that's picked up pace over the last couple of years," he adds. "Nowadays, it seems... it's going really, really down."*

The steep decline in letter volumes has been driven largely by digitalization, and PostNord announced in March that it will cease letter services at the end of the year. It will bring to an end four centuries of letter deliveries by the state-owned operation.

A third of its workforce is being let go, as it sheds 2,200 positions in its loss-making letter arm. Instead it will focus on its profitable parcel business, creating 700 new roles.

> *"Danes hardly receive any letters anymore. It's been going down for years and years," says Kim Pedersen, chief of PostNord Denmark. "They're receiving one letter a month on average, it's not a lot. "On the contrary, Danes love to shop online," he adds. "Global e-commerce is growing significantly, and we are moving with it."*

Fifteen years ago, PostNord operated several enormous letter-sorting facilities, but now there's just one on the western outskirts of Copenhagen. Since 2000, the volume of letters the business handles has declined by more than 90%, from around 1.4 billion to 110 million last year, and it continues to fall rapidly.

Postman Herman Moyano says he is delivering fewer letters these days. As PostNord prepares to cease letter deliveries, 1,500 of its red post boxes are being removed from Danish streets. However, few locals in the capital appear to use them much. Copenhagen resident Nikolaj Brøchner Andrès says he cannot recall when he last sent a letter. "I don't think I've sent a letter in years... I'm not even sure how to do it anymore, to be honest."

From email and cashless mobile payments, to digital health cards carried by smartphone, there's an app for almost everything in Denmark - and it's one of the world's most digitalized nations, second only to South Korea, according to the OECD's 2023 Digital Government Index. The Danish government has embraced a "digital by default" policy, and for more than a decade correspondence with the public has been carried out electronically.

> *"We are facing this natural evolution of a digitalized society, earlier than maybe some other countries," Mr Pedersen explains. "In Denmark, we are maybe five or 10 years ahead."*

The high cost of sending a letter in Denmark is also a contributing factor behind its decline. In 2024, a new law opened up the postal market to private competition and took away its exemption from the country's 25% rate of VAT, so the price of a PostNord stamp jumped to 29 Danish krone ($4.55; £3.35) per letter.

"That made [volumes] drop even further faster," Mr Pedersen points out.
The big fall in the number of letters being posted is replicated Europe-wide, says postal sector expert Hazel King, editor of the magazine Parcel and Postal Technology International.
"Letters across Europe have been declining for years," she says. "I think PostNord's decision is a reflection of how the whole market has gone, and the way the consumer is moving."

Physical mail has dropped by 30% or more from its historical peak, across all major global markets, according to a report by consultancy firm McKinsey.In Europe, Germany and Switzerland have seen the slowest declines in letters, says Florian Neuhaus, who co-authored the study. "It's only 40% there, but everybody else sees around a 50 to 70% decline [since 2008]."

There's a similar pattern in the US, where mail has also declined 46%.
"Clearly this is driven by digitalization and how people communicate in general," adds Mr Neuhaus. "Overall, the economics in letters are just getting worse and worse."

PostNord now has only one sorting office. In March, Germany's Deutsche Post said it was slashing 8,000 jobs, while cost-cutting efforts at the UK's 500-year-old Royal Mail will see it scale back second-class letter deliveries to only every other weekday, while targets for first class delivery times have also been lowered.

"I do think that we will see the end of letters in the mainstream," says Ms King. "However, I'm not sure we'll ever see zero letters, pointing to a necessity to protect medical letters, and services for the elderly, disabled and rural areas."

In Denmark, letter deliveries won't actually come to an end. Instead, private delivery firm DAO will step into the gap with its own nationwide service. Yet DaneAge, an advocacy group for the elderly, fears that older people may struggle with the changes to letter deliveries.

"Most elderly live in small towns and in rural places," says Marlene Rishoj Cordes, one of its senior consultants.
"When there's not as many post boxes around, they will have a harder time delivering mail. "

Meanwhile, the trade union that represents postal workers, 3F Postal Union, has voiced concerns that rural services may worsen. The decline in the posting of letters is a global phenomenon. DAO strongly disagrees with these fears. It's historically a newspaper and magazine distributor with nationwide reach, and has become one of the country's major parcel couriers. A recent survey found DAO's deliveries were faster, with more letters arriving within five days than PostNord.

"We are coming to all households, and we are in the rural areas in the whole country," assures its chief executive Hans Peter Nissen.

Last year it handled 21 million letters and, from 2026, following PostNord's exit, DAO expects to take on 30 to 40 million more. Its staff will deliver letters directly, while doing newspaper and parcel rounds, Mr Nissen explains. Meanwhile, post is collected from mailboxes inside affiliated shops, though doorstep pick-ups can be booked for a small additional fee.

DAO plans to install a new sorting machine and add around 250 more staff to its 2,500 workforce. As physical letters decline across Europe, Denmark's experience perhaps offers a window on the future. In this increasingly digital world, however, there are still many who find joy in sending and receiving personal letters, including Copenhagener Jette Eiring Williams, who writes to her daughter overseas.

"I think the young generation wants that old school feeling," Ms Williams says. "She loves the physical touch of something, so not just an email or a text anymore."

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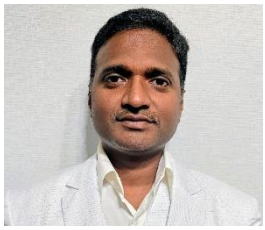
Senior Member News

The IEEE Southeastern Michigan Section is extremely proud and happy to welcome many senior members, who got upgraded (or elevated as we like to call it) to senior status. It is all part of our Membership Development on-going initiative to play a role in the professional lives of our members and support them in every which way possible. ***Congratulations to all.*** Do feel free to contact them for follow up.

--Mohamad Berri, Sharan Kalwani, Sreekanth Narayan:
Membership Development Committee

Newly elevated Senior Members:⇉

Venugopal "Venu" Thirakanam is an Embedded Software Engineering Manager at Magna Electronics, leading global teams and delivering ADAS (front-camera and driver-monitoring) software. With 19+ years of experience, he specializes in microcontrollers and SoCs, AUTOSAR, Linux, image processing, and technical leadership. His initiatives have generated **more than $75M** in savings through SoC/OS optimizations, along with a reusable ADAS software framework now supporting **10+** OEM programs. In 2025, he filed multiple U.S. patents on embedded AI for automotive applications. A keynote and panel speaker, Venu presents on embedded AI, safety, and real-time systems; he also serves as a technical reviewer for SAE International and Judge for the Globee Awards. Venu holds an M.S. in Software Systems from BITS Pilani and a B.Tech in Electronics & Communication from JNTU. He's interested in collaborating, mentoring students, and giving talks that advance safe, intelligent mobility.



Dr. Nabih Jaber is the Chair of the Electrical and Computer Engineering Department and a tenured Associate Professor at Lawrence Technological University, with over 15 years of academic experience and more than 7 years in departmental leadership. He has led transformative enrollment growth, authored successful ABET accreditation reports, and directed the creation of new academic programs, including a Ph.D. in Electrical and Computer Engineering and a Master's in Artificial Intelligence. As founder of the Innovative Smart Wireless Networking Laboratory, Dr. Jaber has authored and co-authored numerous peer-reviewed publications in wireless communications, vehicular networks, smart grids, and AI-driven medical and robotic applications. He has contributed to securing over $1.8 million in research funding, equipment, and industry support.

An active IEEE member and counselor for the LTU IEEE Student Branch, Dr. Jaber mentors students on senior design projects, graduate research, and professional development, preparing them for impactful careers in engineering. He regularly engages in industry collaborations, curriculum innovation, and outreach to promote diversity, equity, and inclusion in STEM. Dr. Jaber is passionate about advancing engineering education, fostering global awareness, and applying emerging technologies to address critical challenges in mobility, safety, healthcare, and energy systems.

Nabih enjoys serving as an IEEE Student Branch Counselor, having done so for nearly a decade, helping students engage in technical talks, competitions, and networking opportunities. He is also interested in expanding his volunteer role by contributing to educational outreach, industry engagement initiatives, and conference organization within IEEE SEM. His background in program development, accreditation, and industry collaboration could help foster stronger connections between academia, industry, and the IEEE community.

Abdul Salam is a Technical Project Leader / Hardware Design Engineer with over 18 years of industry experience in

advanced driver-assistance systems (ADAS), automotive lighting, electrification, high-power inverters, and embedded hardware development. He has a proven track record in full product life cycle design, from feasibility through industrialization, including functional safety, EMI/EMC compliance, and worst-case circuit analysis. Additionally, he has over 6 years of academic teaching experience as an Assistant Professor in embedded systems and electronics, blending theory with industry application. He has been recognized for leading cross-functional, global engineering teams and delivering production-grade solutions for major automotive OEMs. He is now a Senior IEEE member with a strong foundation in ISO 26262, ASPICE, and automotive-grade hardware design standards.

Sunil Waghmare is the Safety Project Performance Lead at Stellantis (FCA US LLC), bringing over 22 years of

experience in vehicle product development, crashworthiness, and virtual simulation and validation. He has played a pivotal role in the development of the fifth-generation Jeep Grand Cherokee and Grand Cherokee L. Sunil is the holder of four granted U.S. patents, with several others pending. These innovations have been successfully implemented in production vehicles, contributing significantly to their exceptional safety performance.

Recognized for his deep expertise in vehicle safety and simulation technologies, Sunil has served as a judge for both the Global Award and the Automotive Testing Technology International Award. He is also a member of the IEEE Senior Member elevation, review, and mentoring committee.

Prior to joining FCA US LLC, he held the position of Senior Manager at IDIADA Automotive Technology India, where he led numerous vehicle development programs and spearheaded advanced simulation methodologies. He holds a postgraduate degree in Mechanical Engineering from the prestigious Indian Institute of Technology (IIT) Delhi, India

A&A Panel Schedule

IEEE HQ Admission and Advancement (A&A) Review Panel Meeting Schedule

The Admission & Advancement (A&A) Review Panels usually meets six times annually to review applications and/or nominations for election or elevation to Senior Member (SM) or Life Senior Member (LSM) grade.

- The review panel meetings are held in various locations throughout the world.
- A panel of reviewers is recruited among Senior members, Life Senior members, and Fellows in the section where the meeting is to be held. This full-day session is presided over by the Admission and Advancement Chair and/or Vice Chair, as well as a representative of the Member and Geographic Activities staff.
- **In order for an application to be reviewed at the next Panel meeting, the application, resume, and required reference forms have to be submitted and received at least Seven days prior to the meeting date**
- About two weeks following a review panel meeting, an update report with the names of the newly elevated Senior members is published and available for those who hold a volunteer position.

Review panel dates and locations (note: Dates and locations are subject to change without notice.)

Please see Meeting Deadlines (Eastern Standard Time) below for more details.

Remaining 2025 IEEE HQ Panel Meeting Dates

Submission ***Deadlines*** (Eastern Standard Time)	Panel Meeting Dates
11:59 p.m. on 20 September 2025	27 September (virtual)
11:59 p.m. on 15 November 2025	22 November 2024

†See our own Section organized events at the Section web site **OR** visit these two major upcoming events: https://events.vtools.ieee.org/m/491040 and https://events.vtools.ieee.org/m/491077

RoboFest Report

Robofest eNewsletter 08-26-25

(1) 2025 Season Kickoff and World Championship Dates
(2) Fall UMC Scholarship Competition and Workshop for High School Students
(3) Autonomous Robotics Field Trips Available for High School Students
(4) Annual Reports and Wrap Up Video Posted
(5) Seeking Technical Committee Members for 2025-2026 Season
(6) Seeking Site Hosts for Competitions

Note: All times are listed in Eastern Time unless noted

(1) 2025 Season Kickoff and World Championship Dates

The Robofest 2025 Season International Rules will be released on Friday, **September 26, 2025**. We will host a series of kickoff meetings to review the rules for clarification prior to the US release in November. All rules will be finalized in January 2026.

The kickoff meetings will be held:

Friday, October 3, 2025 9:00 am~ 10:30 am (Zoom only)
Thursday, November 6, 2025 7:00 pm ~ 8:30 pm (Zoom only)
Saturday, January 10, 2026 10:00 am ~ 11:30 am (In person and Zoom)
Zoom links will be posted to the home page and 2026 Main Page of the Robofest.net website.

The 27th Robofest World Championship will be hosted on the campus of Lawrence Technological University on **May 14, 15 and 16, 2026.**

(2) Fall UMC Scholarship Competition and Workshop for High School Students

Robofest is hosting our third annual Unknown Mission Scholarship Challenge this fall for High School students to compete to win up to a $17,000 Annual LTU Scholarship. Individual students or teams of 2 will be challenged to build and program a robot kit to solve a task in a limited amount of time. The registration fee is $25. The 2025 UMC Scholarship Rules have been posted to the UMC page: https://www.robofest.net/index.php/current-competitions/unknown-mission-challenge

Competition: Saturday, November 1, 2025, 1:00 pm ~ 5:00 pm
At Lawrence Technological University, Computer Science Robotics Lab, J234
21000 West 10 Mile Road, Southfield Michigan 48075
Building No. 8 on the LTU campus map: https://www.ltu.edu/about/map Use parking lot E.

A free workshop has been scheduled for registered students to prepare for the competition using VEX IQ robot kits and VEXcode. Students who attend this optional UMC workshop may borrow a VEX IQ robot kit for the competition on November 1st.

Workshop: Saturday, October 18, 2025, 1:00 pm ~ 5:00 pm
At Lawrence Technological University, Computer Science Robotics Lab, J234

Registration links for the workshop and competition will be opened on the Robofest registration site on September 2nd.

(3) Autonomous Robotics Field Trips Available for High School Students

The Robofest Office would like to invite High School Robotics Clubs or Teams and Computer Science, Math, or Science Classes to participate in a half-day or full day field trip activity that may include mini Robofest competitions. This is a unique opportunity to visit the LTU campus and learn about the exciting Computer Science and Intelligent robotics research currently being conducted in the Computer Science Robotics Labs. Students will also get hands-on experience with coding using Python with Robots.

Coaches, Teachers or Parents interested in coordinating a field trip to campus should contact Prof. Elmer Santos, Robofest Technical Director, at **esantos@LTU.edu.**

(4) Annual Reports and Wrap Up Video Posted

We recently hosted an appreciation event for local Coaches, Site Hosts, Volunteers and Sponsors to review the 2024-2025 Robofest Annual Report, Assessment Report and Wrap Up Video. Links to the reports and video have been posted to the *Whats New* section on the Robofest.net home page. We would like to thank everyone that made the season a success and hope you enjoy reading and watching.

(5) Seeking Technical Committee Members for 2025-2026 Season

Robofest is seeking volunteers to serve on technical committees for competition categories for the 2025-2026 season. Each committee will continue the work from last season to review and refine competition rules, and members will be involved in judging World Championship events and qualifying competitions. Attendance at a monthly in-person or Zoom meeting is expected throughout the season. A short Bio of each committee member will be posted on the Robofest website. If you are not currently on a committee and would like to be part of the organization to help bring the Robofest opportunity to more students around the world, please complete the Google Form: https://forms.gle/nioYYKcTdNn34zgE7

(6) Seeking Site Hosts for Competitions

The Robofest Site Host Applications are ready, and we are seeking site hosts for the 2025-2026 Competition Season. In order to get your location on the pre-season promotional materials, US and International hosts must submit the application by December 19, 2025. New for the 2025-2026 season, in order to cover the rising cost of running the Robofest program, we are implementing a new fee structure for Option 2 & 3 International events. Interested individuals, organizations, or schools should contact the Robofest office at robofest@ltu.edu or visit https://robofest.net/index.php/for-site-hosts for the fee options, information/FAQ document and site application forms.

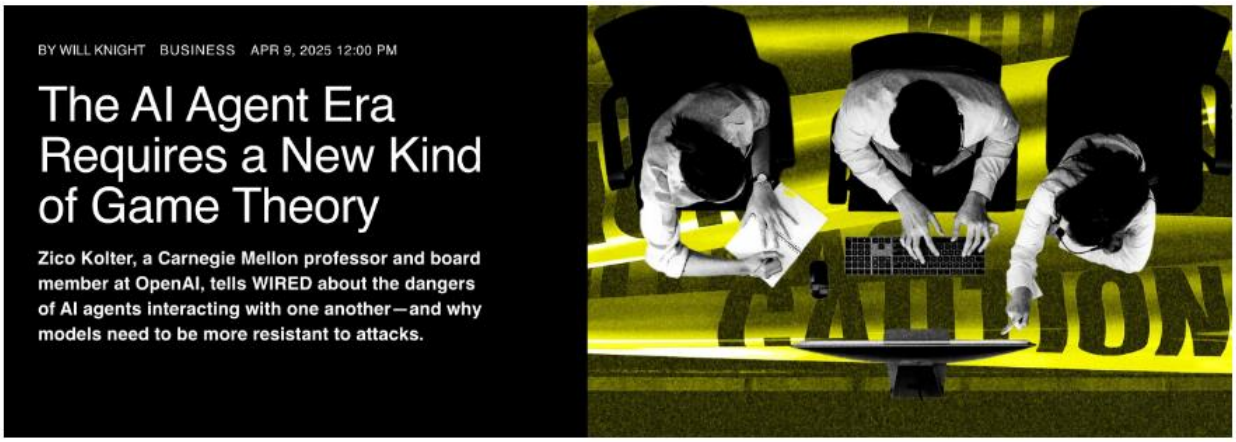
Lawrence Technological University / Robofest / J-233 / 21000 W. Ten Mile Rd, Southfield, MI 48075

Dr. Chris Cartwright, Associate Professor of Math, Robofest Executive Director, Executive Council Member
Prof. Elmer Santos, Robofest Technical Director, esantos@ltu.edu
Shannan Palonis, Robofest Assistant Director, spalonis@ltu.edu
Pam Sparks, Robofest Coordinator, psparks@ltu.edu
Anne Ruch, Robofest Coordinator, aruch@ltu.edu
Dr. CJ Chung, Professor of Computer Science, Robofest Founder, Executive Council Chair
Dr. Eric Martinson, Chair of Math & Computer Science Dept, Executive Council Member
Dr. Vijay John, Associate Professor of Computer Science, Executive Council Member

http://www.robofest.net http://facebook.com/robofest https://www.linkedin.com/company/robofest-official

Got AI?

Got AI?



https://www.wired.com/story/zico-kolter-ai-agents-game-theory/

***Zico Kolter has** a knack for getting artificial intelligence to misbehave in interesting and important ways. His research group at Carnegie Mellon University has discovered numerous methods of tricking, goading, and confusing advanced AI models into being their worst selves.*

Kolter is a professor at CMU, a technical adviser to Gray Swan, a startup specializing in AI security, and, as of August 2024, a board member at the world's most prominent AI company, OpenAI. In addition to pioneering ways of jailbreaking commercial AI models, Kolter designs his own models that are more secure by nature. As AI becomes more autonomous, Kolter believes that AI agents may pose unique challenges—especially when they start talking to one another.

The snippet above came through the IEEE **S**ociety on the **S**ocial **I**mplications of **T**echnology (**SSIT**) which has been the watchdog for IEEE since its inception. With a strong focus on Ethics in Technology and Engineering, SSIT has often been the defenders of 'Whistle Blowers' they shine a light on corporate or government actions that potentially have threats embedded in their actions, activities or products.

Often Whistle Blowers have been engineers who noted problems with product designs, or manufacturing methods and were under threat by management to 'keep quiet' or leave. Early automatic safety systems in the BART, gas tank problems in early Ford Pinto and the booster gaskets in the Challenger space craft are notable cases in the past. In each case, engineers sounded the alarm and management that had its eye firmly fixed on financial or political factors ignored the engineer's warnings.

Everyone who joins the IEEE, is required to check the box that declares they have read and agree to and follow the IEEE Code of Ethics. Fewer members are aware of the IEEE Code of Conduct. For your benefit you may use Cntl+Click to follow both links below to read these seminal IEEE documents.

Review the IEEE Code of Ethics
Review the IEEE Code of Conduct

Please take a few minutes to review both these and consider how they apply to your life and your career.
30

Got ~~Software~~ Hardware?

Got ~~Software~~ Hardware?

I recently attended the Michigan Science & Engineering Fair in both of its incarnations and was impressed by the breadth and range of concepts and in industry of the students in developing projects and explaining them according to the requirements of the Fair. By the 2nd event held at Lawerence Institute of Technology, the number of physical demonstrations had dwindled down to only a very few.

The bulk of projects, in every category that I saw, relied on computer modeling and a detailed plan to integrate the program with as yet to be developed 'physical items' that would gather information, or control or manipulate the real world.

There were several that did construct complete physical demonstrations of the basic concept, and they were fun to see and watch in action. I recall several engineers that I have known that mentioned that they only really understood the equations and diagrams connected with the technology they were using once they had to build the equipment and actually make it work. It is my hope that those students in the Science Fair experienced that same 'Ah Ha' moment during their build up to the Fair. If they did, we will likely see them in the future as successful engineers working in our industries or teaching in our schools.

I have less optimism for the students who developed complex and detailed software simulations of what they believed were going to be the conditions or materials they expected to be working with when and if the technology they expected to evolve became available. I have no doubt that those students will become adept programmers and manipulators of possible conditions in infinite variations with models that may eventually come close to describing reality.

It is my real hope that the items and conditions they were describing in their current work become available for them to build with soon, so that the universe can begin the next steps in their educational process.

That process and its results are most aptly illustrated in the work of Michael Faraday. Michael had no computer models. In fact, he had no mathematical background at all. What he had were some physical materials that could conduct something that was thought of at the time as an electric 'fluid' and some materials (rocks) that demonstrated some strange attractive force for a few of the metals available at the time but not others. Michael Faraday experimented with those materials and observed the results and made assumptions. When the assumptions turned out not to be consistent or repeatable, they were discarded and further experiments tried to clarify the observed results. When he found consistent, repeatable experimental results, he described the work as clearly as he could and asked his friends and associates to see if they could get the same results. (We now call that the 'scientific method'.)

Building up a computer model of something that may come into existence at some point in the future, creating a model of a universe in which it operates, and a system within that model that could perform a useful function seems entirely too much like a fantastic computer game. In the real world we have the physical universe that can give us 'feedback' when we try to go beyond the limits imposed by reality. Step off the edge of a curb, and you drop down to the street. Gravity cannot be set aside because it is not convenient at the time.

Please do not misunderstand me. I believe that computer modeling of known forces and elements is a valuable and useful tool for both engineering and research. When the model is 'tuned' based on real experimental evidence, those models can help us take the next steps forward, when all the known constraints and current experimental evidence are built into the model.

Without those constraints and experimental evidence, we may have a wonderful way of convincing ourselves to believe that something will behave in a way that meets our hopes and dreams but fails the 'real world' test. One way to 'convince' us that our dream is possible is to build a working model and see what happens. If the model functions as we expected, that's 'nice'.

What is great is when the working model does something we did not expect. That is when the experimenter says, "That's interesting." "What is causing that?"
That is the point where we really begin to learn!

30

Automotive AI in Law

Automotive AI in Law Enforcement Vehicles: Engineering Public Safety for the Future

As automotive systems evolve toward full autonomy, a parallel transformation is quietly reshaping the vehicles tasked with protecting our communities. Law enforcement fleets traditionally built for durability and response are now becoming platforms for embedded intelligence, real-time analytics, and coordinated autonomy. At the intersection of automotive engineering and public safety, 'AI-powered law enforcement vehicles' represent a frontier where embedded systems meet civic responsibility.

From Patrol Cars to Autonomous Public Safety Platforms

Modern police vehicles are no longer passive transport units. They are increasingly equipped with:

- *Edge AI modules*- for real-time scene understanding
- *Sensor fusion systems*- for evidence logging and anomaly detection
- *Multi-agent coordination protocols*- for fleet-level response
- *Secure ECUs*- that manage mission-critical tasks under ISO 26262 and AUTOSAR compliance

These capabilities enable vehicles to detect threats, document incidents, and assist officers with decision-making all while maintaining operational integrity in dynamic environments.

Regional Relevance and Engineering Leadership

Michigan, home to the nation's automotive innovation corridor, is uniquely positioned to lead this transformation. With its ecosystem of OEMs, Tier 1 suppliers, and embedded AI researchers, the region offers fertile ground for prototyping and deploying intelligent law enforcement platforms.

Embedded AI: The Technical Backbone

The integration of AI into law enforcement vehicles demands a multidisciplinary approach:

- *Hardware benchmarking*- for TinyML and low-power inference
- *Robust software architectures*- for real-time decision loops
- *Data governance frameworks*- for privacy, transparency, and auditability
- *Human-machine interfaces*- that support officer override and situational control

These systems must operate reliably under constraints of latency, bandwidth, and environmental variability, making embedded AI not just a feature, but a foundational enabler.

Engineering for Accountability and Equity

Beyond technical performance, automotive AI in law enforcement vehicles has the potential to enhance transparency, reduce bias, and improve community trust. By standardizing incident documentation and enabling objective scene analysis, these systems support equitable enforcement and reduce reliance on subjective judgment. They also offer scalable solutions to address officer shortages and expand coverage in underserved areas.

Call to Collaboration

As engineers, researchers, and standards contributors, we have a unique opportunity to shape the future of public safety through responsible innovation. Whether through IEEE working groups, cross-sector partnerships, or academic-industry collaborations, the development of AI-enabled law enforcement vehicles invites us to rethink mobility not just as a technical challenge, but as a civic imperative.

About the Author

Raghu C. Nallapati is a Software Team Lead for Body Controls in GM's Software-Defined Vehicle (SDV) architecture. He is also a Doctor of Engineering candidate at the University of Michigan, where his research focuses on embedded AI solutions for next-generation automotive platforms, particularly in law enforcement and public safety applications.

Raghu is a Senior Member of IEEE, Co-Chair for IEEE SEM Student Activities Committee (SAC), Organizer and Secretary for the planned 2026 IEEE Southeastern Michigan Section AI Conference. He is also a member of the International Association of Chiefs of Police (IACP). In addition to his engineering and outreach roles, Raghu contributes as a standards developer with IEEE Standards Association (IEEE SA) and SAE, focusing on AI systems and road exterior automotive lighting, advancing safety, interoperability, and innovation across intelligent mobility platforms.

Activities & Events

We try to publish IEEE events in several places to ensure that everyone who may want to attend has all the available relevant information. **NOTE: The IEEE SE Michigan section website is located at https://r4.ieee.org/sem/**

SEM Wavelengths:
https://r4.ieee.org/sem/about-sem/sem-history/wavelengths-magazine-archive/

SEM Calendar of events:
https://r4.ieee.org/sem/sem-calendar/
Select "SEM Calendar" button in the top row of the website. This is our 'Active' event listing site where everyone should look first to see what events are scheduled for our Section in the near future.

SEM Collabratec Workspace:
https://ieee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities
An IEEE supported WORK space for online chat, discussions, connecting with SECTION specific IEEE activities, besides geared/focused towards our local Southeastern Michigan officers.

vTools Meetings:
https://vtools.ieee.org/
Select "Events" on the right hand side and then "manage Events" and then "Schedule" button in the left-hand column of buttons.

Other Happenings

Here are some of the non-IEEE functions that may be of interest to you or someone you know. Let us know if you have a special interest in a field that encourages technical study and learning and wish to share opportunities for participation with members of the section. NOTE: Copy the URL and paste it into your browser address bar.
These websites were checked in June 2022 and found viable.
Send details to: wavelengths@ieee-sem.org OR letters@ieee-sem.org

Michigan Institute for Plasma Science and Engineering: Seminars for the academic year:
https://mipse.umich.edu/seminars.php

Model RC Aircraft
http://www.skymasters.org

Model Rocketry
https://www.nar.org/find-a-local-club/nar-club-locator/

Astronomy
http://www.go-astronomy.com/astro-clubs-state.php?State=MI

Experimental Aircraft Association
https://www.eaa.org/en/eaa/eaa-chapters/find-an-eaa-chapter

Robots
https://www.robofest.net/index.php/about/contact-us

Science Fiction Conventions
https://penguicon.org/

http://www.confusionsf.org/

Mad Science
http://www.madscience.org/

ESD PE Review Class
https://www.esd.org/programs/pe/

Maker Faire:
https://swm.makerfaire.com/

It appears that the SouthWest Michigan Maker Faire was a casualty of the Global Pandemic, as were many of our friends and several organizations.

However, we retain this link for anyone wishing to make contact and consider pumping life back into what was a wonderful experience.

ORG UNITS cheat sheet

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit code is in parentheses)		
Consultants Network Affinity Group: (CN40035)		
Life Members: (LM40035)		
Young Professionals: (YP40035)		
Women in Engineering: (WE40035)		
Chapter: 01 (CH04049)	(SP01)	Signal Processing Society,
	(CAS04)	Circuits and Systems Society and
	(IT12)	Information Theory Society
Chapter: 02 (CH04051)	(VT06)	Vehicular Technology Society
Chapter: 03 (CH04053)	(AES10)	Aerospace and Electronic Systems Society and
	(COM19)	Communications Society
Chapter: 04 (CH04050)	(AP03)	Antennas and Propagation Society,
	(ED15)	Electron Devices Society,
	(MTT17)	Microwave Theory and Techniques Society,
Chapter: 05 (CH04055)	(C16)	Computer Society
Chapter: 06 (CH04056)	(GRS29)	Geosciences and Remote Sensing Society
Chapter: 07 (CH04057)	(PE31)	Power Engineering Society,
	(IA34)	Industrial Applications Society
Chapter: 08 (CH04088)	(EMC27)	Electromagnetic Compatibility Society
Chapter: 09 (CH04087)	(IE13)	Industrial Electronics Society,
	(PEL35)	Power Electronics Society
Chapter: 10 (CH04142)	(TEM14)	Technology and Engineering Management Society
Chapter: 11 (CH04099)	(EMB18)	Engineering in Medicine & Biology
Chapter: 12 (CH04103)	(CS23)	Control Systems Society
Chapter: 13 (CH04113)	(E25)	Education Society
Chapter: 14 (CH04115)	(RA24)	Robotics And Automation Society
Chapter: 15 (CH04144)	(NPS05)	Nuclear Plasma Sciences Society
Chapter: 16 (CH04125)	(CIS11)	Computational Intelligence Society,
	(SMC28)	Systems, Man and Cybernetics Society
Chapter: 17 (CH04128)	(NANO42)	Nanotechnology Council
Chapter: 18 (CH04162)	(MAG33)	Magnetics Society

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit code is in parentheses)	
University Of Detroit-Mercy:	(STB00531)
Michigan State University:	(STB01111)
University Of Michigan-Ann Arbor:	(STB01121)
Wayne State University:	(STB02251)
Lawrence Technological University:	(STB03921)
Oakland University:	(STB06741)
Eastern Michigan University:	(STB11091)
University of Michigan-Dearborn:	(STB94911)

And of course our Section OU # is : R40035!

Use the Geo-unit 'Codes' (Shown above between brackets '()' for faster access in the vTools system applications.
Example: Using STB94911 in the vTools search window goes directly to the Student Branch.
Faster than typing 'University of Michigan-Dearborn'. This works for all Affinity Groups, Technical Chapters and Student Branches.

HKN Code	HKN Name (Student IEEE Honor Society)
HKN029	University of Michigan-Ann Arbor, Beta Epsilon
HKN042	University of Detroit-Mercy, Beta Sigma
HKN054	Michigan State University, Gamma Zeta
HKN073	Wayne State University, Delta Alpha
HKN163	University of Michigan-Dearborn, Theta Tau
HKN164	Lawrence Institute of Technology, Theta Upsilon
HKN190	Oakland University, Iota Chi
HKN244	Southeastern Michigan Alumni

Why do we publish this? Well, this is most useful when searching the vTools page for entering L31s or creating new events or searching for existing events!

Curated & Maintained By
Sharan Kalwani,
Chair, IEEE Southeastern Michigan Section (2022-2025)
Editor, Wavelengths (*Serving you as an active newsletter contributor since 2018)*
Enthusiastic IEEE volunteer since 2011

Use the Geo-unit ‘Code’ for faster access in the vTools system applications.

Executive Committee

The Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the current arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month, usually on a Thursday at 6:30 pm. The specific meeting days, times, phone or WebEx numbers and log in codes are published on the IEEE SEM Website calendar: **https://r4.ieee.org/sem/** Click on the "Calendar" button in the top banner on the first page of the web site.

If you wish to attend, or just monitor the discussions, please contact **Christopher Johnson**, the section secretary at secretary@ieee-sem.org and request to be placed on the distribution list for a monthly copy of the agenda and minutes. More meeting details are available on the next page of this newsletter.

Other Meetings:
About half of our members maintain memberships in one or more of the IEEE technical societies, which automatically makes them members of the local chapter which is affiliated with that society. As a result, they should receive notices of the local chapter meetings each month.

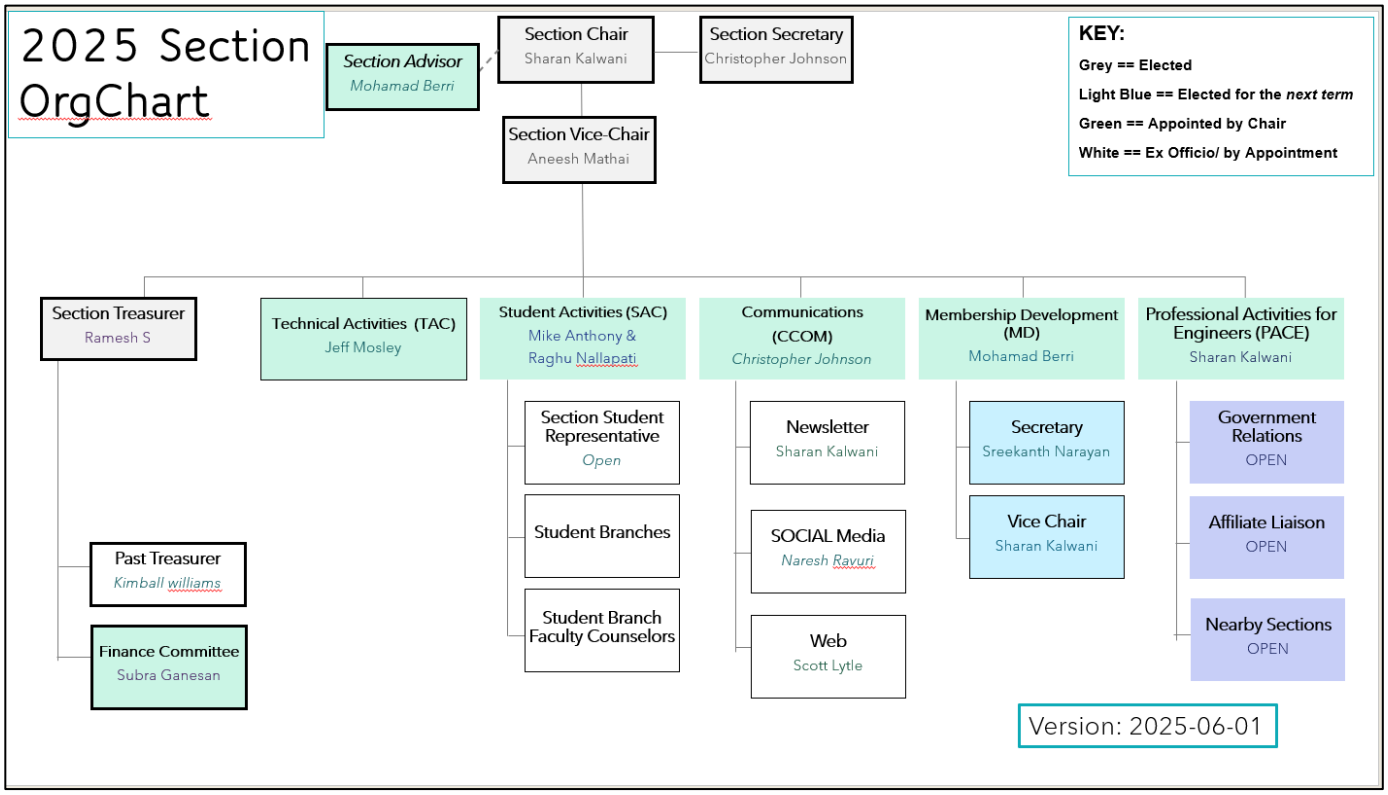
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to send meeting information to our webmasters for posting on section's calendar.

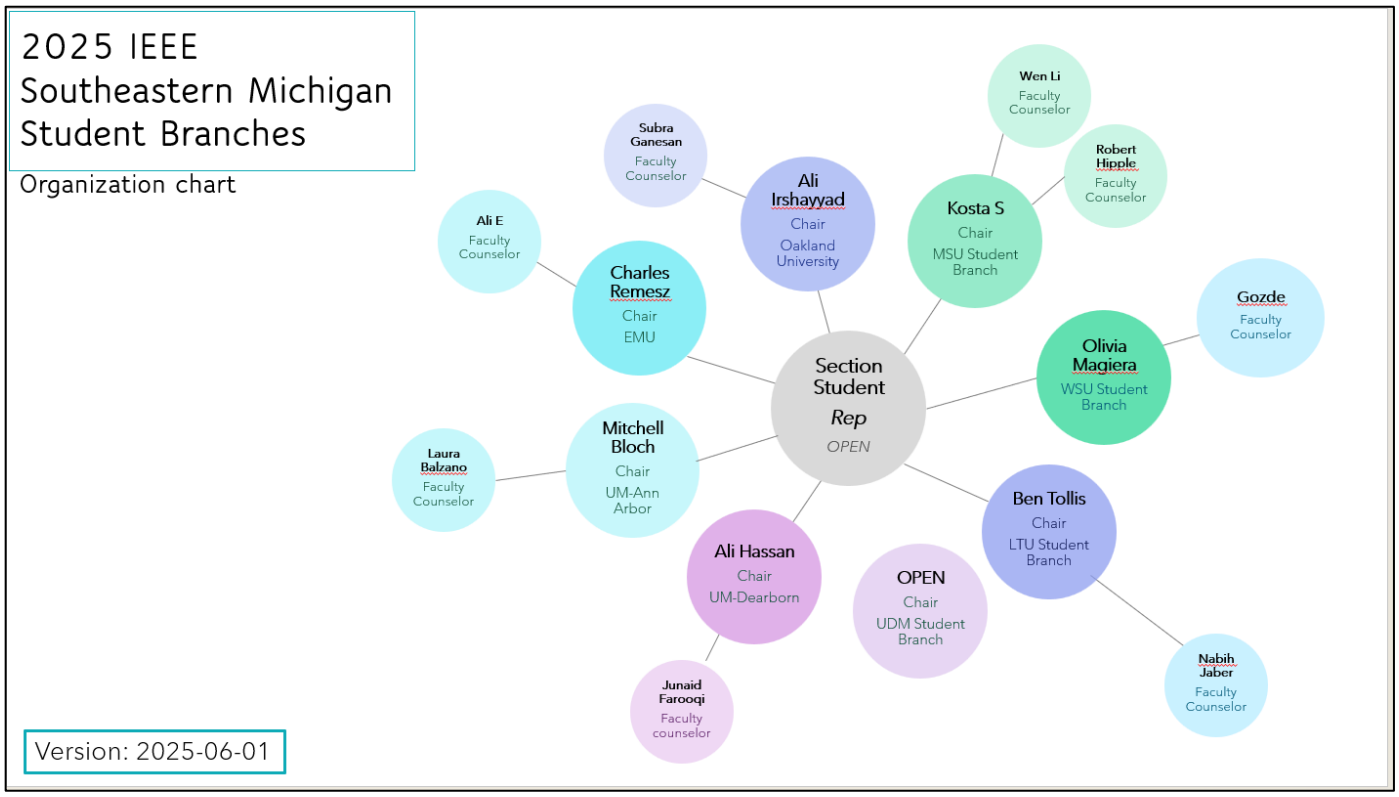
More detailed information on meetings may be found through the IEEE SEM Website: **https://r4.ieee.org/sem/** and clicking on the **SEM meetings list** button near the bottom of the left-hand banner.

Automatic e-mail notification of web updates may be received using the "**Email Notifications**" button at the top of the **SEM Tools/Links** side banner.

Christopher Johnson (Secretary)
Email: secretary@ieee-sem.org

If you wish to download the complete SEM Organization Chart, in PDF format, it available soon at https://r4.ieee.org/sem/ . In the meantime, you may use the diagram below (recently refreshed!)





ExCom 2025 Schedule

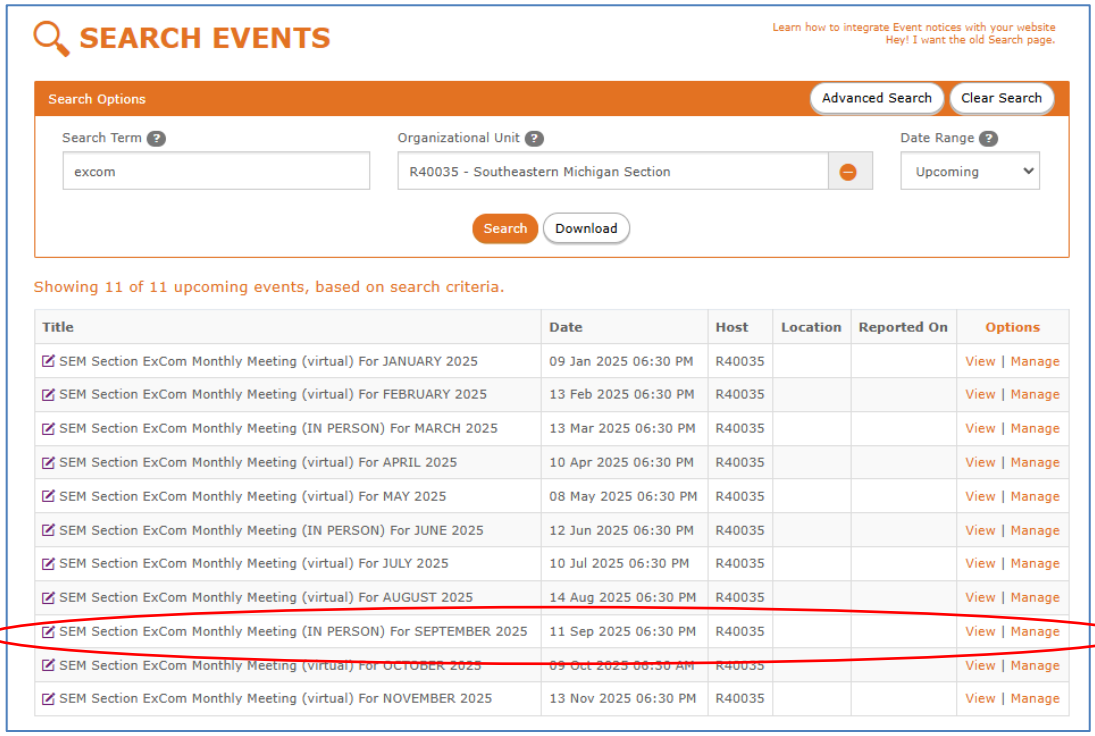
NOTE: All SEM members are invited to attend ALL ExCom (Executive Committee) meetings:
Below is the 2025 schedule for the Section ExCom meetings with links to add the events to your calendar. It is important that ***at least one person*** from each Chapter/Affinity Group attends each scheduled ExCom meeting. Please mark your calendars for the 2025 meetings. Or link your personal calendar to the SEM Web calendar.
Section ExCom Meeting Schedule for 2025: (clickable links, SO YOU CAN EASILY REGISTER)

Note: All IEEE Members are welcome at any IEEE meeting, at any time but please register so we can be sure to accommodate you. This month's meeting is highlighted.

ExCom Meeting (all clickable links)	*Date & Start Time, Duration*
SEM Section ExCom Monthly Meeting (IN PERSON) For SEPTEMBER 2025	**2025-09-11; 6:30 PM; 2 hours**
SEM Section ExCom Monthly Meeting (virtual) For OCTOBER 2025	2025-10-09; 6:30 PM; 1 hour
SEM Section ExCom Monthly Meeting (virtual) For NOVEMBER 2025	2025-11-13; 6:30 PM; 1 hour

Christopher Johnson (Secretary)
Email: secretary@ieee-sem.org

ExCom 2025 Calendar



Section Administrative Committee (ExCom) Meeting Schedule for 2025 (At a Glance), you can print this page and pin it up anywhere easily visible……

Editor's Corner

Previous editions in this series may be found on the IEEE SEM website at: https://r4.ieee.org/sem/. Click on the "Wavelengths" button in the top row of selections.

Comments and suggestions may be sent to the editorial team at wavelengths@ieee-sem.org

OR
sharan.kalwani@ieee.org
k.williams@ieee.org
cgjohnson@ieee.org

We rely on our officers and members to provide the 'copy' that we finally present to readers of the newsletter. The **Wavelengths Focus Plan and Personal Profiles** plan shown in the matrix below is presented to ensure coverage of section activities and events.

We try to complete the newsletter layout a week before the first of the month to allow time for review and corrections. If you have an article or notice, please submit it two weeks before the first of the month or earlier if possible.

The plan below relies on the contributions of our members and officers, so please do not be shy. If you have something that should be shared with the rest of the section, we want to give you that opportunity.

We always encourage all chapters and student branches to share news of activities (both past and future) in their arenas. Please feel free to share any and all information so your peers, colleagues can hear about all the good work you do.

Quote*:*

"If a tree falls in a forest and no one hears it, how do you know it actually fell??"

So, publicize your work, one never knows when it can pay off!

Editors:

We are always looking for members interested in helping to edit the newsletter. The process is always more fun with more people to share the duties. Having more participants and contributors also helps us keep the newsletter interesting.

Join the Team:

If you feel you might like to join the team, or would like to train with us, please contact one of us at:
wavelengths@ieee-sem.org

Sharan Kalwani,
Chair, IEEE SE Michigan Education Society Chapter
Vice-Chair, IEEE SE Michigan Computer Society Chapter
Co-Editor, Wavelengths,
2018~2019~2020~2021~2022-2023-2025

Wavelengths Annual Publication Plan for Articles

Month	AG's	Ch's	Ch's	SB's	Special Notice	Reporting Events	Monthly Focus	Awards
Jan		1		OU	Future Cities Judges	Election Results	Resolutions	
Feb	Cons	2		MSU	Science Fair Judges	Officer's Welcome	Surviving Winter	Future Cities
Mar		3	13	EMU	Spring Conf. Flyer	Spring Conference	Spring Conference	Science Fair
Apr		4		U/M-D	National Engrs Wk.	Future Cities	Chapter Focus	ESD - GOLD
May	Life	5	14		Outstanding Eng Awd	Science Fair	Elections - Prep	New Fellows
Jun		6			IEEE-USA Apmts.	ESD Banquett	Leadership Skills	SEM Awards
Jul		7	15		Nominations Call	MD-Webcasts	Students Issues	Region 4
Aug	WIE	8			MGA - Apmts.	Tech-Webinars	Womens Issues	
Sep		9	16	LTU	Region 4 Apmts.	Engineers Day	Professional Skills	
Oct		10		U/M-AA	Fall Conf. Flyer		Fall Conference	
Nov	YP	11	17	WSU	ELECTIONS!		Humanitarian	
Dec		12		U/D-M	IEEE-Com Apmts.	Fall Conference	Happy Holidays	

Wavelengths Annual Publication Plan for Personal Profiles

Month	Profiles	Profiles	Committees
Jan	Chair	New Officers	
Feb	V-Chair	Secretary	Communications
Mar	Treasurer	Sect-Adviser	Conference
Apr	Stud-Rep		Education
May		Sr Officers	Executive
Jun			Finance
Jul			Membership
Aug			Nominations
Sep			PACE Activities
Oct			Student Activities
Nov			Technical Activities
Dec		Editor-WL	

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Web & Social Sites

Southeastern Michigan Section Website
https://r4.ieee.org/sem/

Each of the sites below may be accessed through the Website:

Section Website Event Calendar
(Select the "SEM Calendar" button - top row)

SEM Facebook Page
(Select the "" button under the top row)
https://www.facebook.com/groups/ieeesemich

SEM LinkedIn Page
(Select the "" button under the top row)
https://www.linkedin.com/groups/1766687/

SEM Twitter Account (new)
(Select the "" button under the top row)
https://www.twitter.com/ieeesemich

SEM Collabratec *Community* Page
https://ieee-collabratec.ieee.org/app/section/R40035/IEEE-Southeastern-Michigan-Section

SEM Collabratec *Workspace* Page
https://ieee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities

SEM Instagram (new)
https://www.instagram.com/ieeesemich/

SEM Officers:
For a complete listing of all - Section - Standing Committee - Affinity Group - Chapter and Student Branch SEM Officers Roster on the web page (top banner)

Section Officers

Section Chair
Sharan Kalwani

Section Vice-Chair
Aneesh Mathai

Section Secretary
Christopher Johnson

Section Treasurer
Ramesh Sethu

Standing Committees:

Section Adviser
Mohamad Berri

Wavelengths Editor
Sharan Kalwani

Educational Committee
Anthony Will (Chair)

Finance Committee
Subra Ganesan (Chair)

Membership Development
Mohamad Berri (Chair)

Awards & Nominations
Jerry Song (Chair)

PACE
Sharan Kalwani (Chair)

Student Activities
Michael Anthony, Raghu Nallapati (Co-Chairs)

Student Mentors
OPEN

SECTION Student Rep
OPEN

Technical Activities
Jeffery Mosley

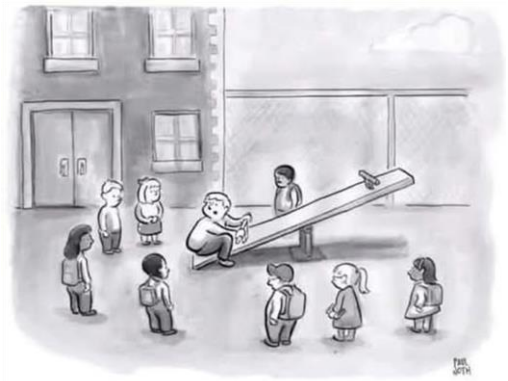
Information Mgmt. Coordinator
Kimball Williams

IEEE Southeastern Michigan

Electrical and Electronic Engineers Creating Our Future

IEEE Southeastern Michigan

Visit Us on the Web at:
https://r4.ieee.org/sem



"O.K., now, when a teacher comes out, everybody look straight up."

Advertising Rates

SEM Website & Newsletter Advertising is coordinated through our e-Wavelengths website at:

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:

- 2nd Thursday of Each Month @ 6:30 PM
- Check the Section Web Calendar at:
  https://r4.ieee.org/sem/sem-calendar/
  (Select the "SEM Calendar" button in the top row.)

SEM Executive Committee Face-to-Face Meetings:

- 1/Qtr. Find the location, and Registration at:
  http://bit.ly/sem-ieee

SEM Standing Committee Meetings:
SEM Affinity Group Meetings:
SEM Technical Society/Chapter Meetings:
SEM University Student Branch Meetings:

- Meeting schedules are announced on SEM Calendar
  https://r4.ieee.org/sem/
  (Select the "SEM Calendar" button in the top row.)

- Registration for all at:
  https://bit.ly/sem-upcoming