

Wavelengths



Volume 62 – Issue 06

Contents

Upcoming Events	1
Chair's Column	2
Technical Activities Report	3
Election Prep	4
EMCFest 2022	5
2022 IAS Annual meeting	6
WIE Activity	7
2022 Volunteers	8
HamVention 2022	9
SEM STEM	10
Chapter of the Year award!	11
Member News	12
IFIP Intelligent Vehicle Workshop	13
ORG UNITS cheat sheet	14
RoboFest Update	16
Activities & Events	17
Executive Committee	18
ExCom Meeting Schedule	19
Editorial Corner	20
Web & Social Sites	22
Advertising Rates	23
Leadership Meetings	23

Upcoming Events

We have several events coming up this month. Listed below are some of the events, FYI.

Event	Date	Time
SEM Section ExCom Monthly Meeting (TELECONFERENCE) for June 2022	02 Jun 2022	06:30 PM
SEM EMBS Admin Meeting	07 Jun 2022	12:00 PM
Conference on Recent Trends in Embedded Artificial Intelligence (CREAI'22)	09 Jun 2022	09:00 AM
Ch8: AdCom Teleconference	09 Jun 2022	11:00 AM
EMC Society Monthly tech Meeting	16 Jun 2022	05:30 PM
IEEE-USA and Michigan Engineering Policy Updates	16 Jun 2022	06:00 PM

Note: All times are EST/EDT. If any events are missed do kindly bring them to the attention of wavelengths@ieee-sem.org. Thank you!

Chair's Column

This is the 6th column I am now sharing with all of our IEEE Southeastern Michigan community. We continue to refresh our website and post more events to the social media sites. On that note, I would like to welcome Robert Hipple of MSU, who has volunteered to help out with our social media efforts. Right now, he is handling Collabratec and LinkedIn pages. Take a moment to say hello to Robert (hipple@msu.edu).



Often new members ask – how can I contact the chair or who is the treasurer or secretary etc.? Look 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!

I encourage you to add us to your twitter feed:

- ✓ Twitter – <https://www.twitter.com/ieeesemich>

I would like to encourage all our members to consider **volunteering** to the role of our social media moderators, which is easy to do, and we would be happy to show you're the ropes. Essentially it involves noticing articles of EE technical interest and sharing it on those sites. Of course, our Section events take top priority 😊! Feel free to reach out to any of the section officers and connect so we can put you in touch with the right people.

Upcoming events in our region are plenty. Chapter 5 is organizing Conference on Recent Trends in Embedded Artificial Intelligence (CREAI'22) – see <https://events.vtools.ieee.org/m/314261> (this will be opened up to all of our Section members soon!) You can find announcements on ALL of public facing sites (you can use the icons below as well). We have another eclectic crop of informative documentary movies.

I wish to congratulate our EMC chapter for a fantastic EMC Fest this past May. They did a great job and I look forward to more in 2022 and beyond. There is an excellent summary article with pictures elsewhere in this issue of Wavelengths.

Coming up soon is also a PACE event – this time to learn on matters concerning us engineers and things happening at the government level. This is coming up in the month of June (see <https://events.vtools.ieee.org/m/308476>)!

The next ExCom meeting is on the 2nd of June, you will get reminders from me and Christopher Johnson as well. I would love to hear from everyone, the full list of ExCom meetings and their links has been published in this and every newsletter as well as on vtools. One of the major topics will be the 2022 Budget. I also plan to reach out to all the Student branches and re-engage them with our Section. In these days of pandemic restrictions, it is important NOT to lose touch with our past, current, future potential members and remain engaged w/ our community!

Finally, I also wanted to mention that compared to the rest of the sections in ALL of Region 4 – we are doing extraordinarily well in terms of technical activities and events. So, it is no surprise that Chapter 5 (Computer Society technical chapter) won the Outstanding Computer Society Chapter of the year award! Those of you who have been regularly attending the ExCom – will recall the infographic I share showing our achievements when compared to all the other IEEE chapters/sections. I will share more during the next ExCom meeting.

Sharan Kalwani

Via email: chair@ieee-sem.org

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



Technical Activities Report

2022 IEEE SE Michigan Section Geo-unit Status (Till May 28th)

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
Cnslt	0	0	0	0	1	0	Consultants Network	0	1
LIFE	0	0	0	0	2	0	Life Members	0	2
WIE	14	1	2	4	0	0	Women In Engineering	0	6
YP	0	0	0	0	0	0	Young Professionals	0	0
1	78	0	1	0	0	0	Circuits & Systems, Signal Proc., Info Th.	0	1
2	78	0	1	1	0	0	Vehicular Technology	0	2
3	0	0	0	0	0	0	Aerospace & Elec. Sys., Communications	0	0
4	0	0	0	0	0	0	Trident (Ant, Elect Dev., uWave, Photo)	0	0
5	30	7	21	1	1	1	Computers	0	24
6	0	0	0	0	0	0	Geoscience & Remote Sensing	0	0
7	0	0	0	4	0	0	Power Engineering, Industrial App.	0	4
8	64	46	6	5	0	1	Electromagnetic Compatibility (EMC)	0	12
9	24	4	3	1	0	0	Power Electronics, Industrial Electronics	0	4
10	1	0	1	0	0	0	Engineering Management	0	1
11	55	37	1	1	0	0	Eng. in Medicine & Biology	0	2
12	0	0	0	0	0	0	Control Systems	0	0
13	14	3	10	1	0	1	Education	0	12
14	0	0	0	0	0	0	Robotics & Automation	0	0
15	42	27	4	0	0	0	Nuclear Plasma Science Society	1	4
16	78	0	1	0	0	0	Computational Intelligence / Sys.Man.Cyber.	0	1
17	0	0	0	0	0	0	Nano Technology Council	0	0
SEM	39	5	4	11	2	0	SEM (Section)	1	17
	517	130	55	29	6	3	NOTE: Highlight Green = Active	2	93
		25%					NOTE: Highlight clear = Concern		

The Technical Activity Committee welcomes new members Raees Ham, Alan Haag, Youngsoon Yong, and Robert Hipple!!! There is still a need to plan and conduct meeting before the end of this calendar year. GA leaders please reach out to the TAcOm for any assistance. GA members if you have suggestions or requests for technical meetings please contact me via the email below.

Your TAcOm plans to continue contacting chapters and groups needing assistance in meeting IEEE and SEM Section goals for encouraging member participation and discussions related to the vast amounts of technical and engineering challenges facing our world.

V/r

Jeff Mosley

Chair, Technical Activities Committee, R4 IEEE SE Michigan, jvmosley@ieee.org

Election Prep

In the May issue of Wavelengths I explained the necessity of finding suitable candidates in order to prepare a useful ballot for the election process. Ballots with no candidates presented for an office usually winding up with “I abstain” being elected to almost every office. (That means there was not candidate already identified on the ballot, and the voter opted ‘Out’ of the process without even suggesting a ‘write-in’ candidate.)

The need to identify viable candidates involves a few steps:

- Find that person you trust to represent you in the organization,
- Check to be sure they are willing to hold and function in the office,
 - Chair,
 - Secretary,
 - Vice-Chair,
 - Treasurer,
- Verify that they are an ‘Active’ (paid up) IEEE member,
- Verify that they are a member of the Affinity Group or Chapter (Geo-unit),
- Get their IEEE member number, email account and phone number,
- Be sure they understand you intend to nominate them for an office.

In mid-August through mid-September we will be presenting all our members with the link to a survey form designed to collect all the ballot nominations for all the Section and ‘Geo-unit’ offices. I know that August and September seem like a long way off. But, ‘Tempus Fugit’ (Time Flies) as the Roman’s say, and before you know it, it will be the last day to find someone you like and trust to put on the ballot for your favorite Chapter or Affinity Group.

Also, remember there are four (4) ‘count em’ officer positions on each Geo-unit that need to be nominated with someone who will do more than ‘warm the chair’ for the next year.

Is the person in the position now someone who is doing a good job and you want to keep them in that position? Nominate them! If you don’t, who knows might wind up in that position next year?

Ballot Nominations:

Mid-August through mid-September – On-line Nomination Survey. Everyone has the option to nominate the Section officers, and every member of a Society with a Chapter or Affinity group in our Section can nominate for those positions as well.

Note: This year Section positions include Chair and Vice-Chair ‘Elect’ for their one year of ‘on the job’ training. Next year they will take the office in full.

Ballot Construction:

Gather / sort / rationalize Nominations Survey results and build vTools Election system ballots.

The formula is: (4 AGs + 17 Chapters) X 4 positions + (ExCom) X 2 positions = 86 individual ballot ‘slots’ and the MGA asks us to find 3 candidates for each office which is potentially 258 ballot entries.

Election:

Ballots sent to entire Section for ExCom posts and to each Geo-unit.

Note: Everyone receives the ExCom ballots. Members of IEEE Societies receive ballots related to the local Geo-unit representing that Society or Affinity Group.

Collation of Results:

We have the ExCom, 4 Affinity Groups and 17 Technical Chapters to collate. The formula is (4 AGs + 17 Chapters) + ExCom = 22 individual election ballots to analyze for who ‘won’ each position for the Geo-unit.

Results to SEM ExCom:

Final results are delivered to the Executive Committee at its meeting in December.

At which time, we begin officer training.

Kw

EMCFest 2022

On May 12, 2022, 232 EMC (Electromagnetic Compatibility) engineers, suppliers, software vendors and experts representing our own Southeastern Michigan Section Chapter, along with members from West Michigan Chapter, Chicago Chapter, Central Texas Chapter, Japan Chapter, Germany Chapter, etc., you get the idea.

EMCFest here in our Section cooperates with our sister Chapter in Chicago to hold an EMCFest in Chicago on Tuesday and here in Southeastern Michigan on the following Thursday. This gives the 50 vendors who support the event two of their most effective 'sales calls' in the year, with minimal travel.

The 2022 event was initially planned to be held in 2020 but the Global Pandemic caused a postponement to 2021 and then to this year when we all finally were able to gather face-to-face and what a joy it was to see friends and acquaintances again after so long with little or no contact, except through email and/or ZOOM.



We took this opportunity to present 'awards' to two of our most diligent working members of our Chapter to say "Thank you" for all they have done and continue to do for us.

At the left, Dr. Candace Suriano is pleased to present an award to our Chapter photographer, Akio Fujimaki for taking all the photos of our Chapter meetings, EMCFest and helping Malcolm Lunn sort out and set up all the audio / video equipment at each of our gatherings.



At the right, I was able to present Matt Feusse an award and a pen in thanks for his long service as our Chapter Treasurer. Yes, Matt is really that tall, and I am that short.



Of course, the main event was the presentations by our speakers, and a great deal of insight was provided by Dr. Bogdan Adamczyk, Jim Tuene, and Scott Mee. All three of our speakers are associated with Grand Valley State University in Grand Rapids, Michigan.

And how better to close a wonderful show like EMCFest 2022 than with our traditional Ice Cream Social to 'wind down' and take a break before trying to fight traffic going home. Scott Lytle, our Chapter Chair handed out the door prizes while we all enjoyed chocolate and vanilla with lots of delicious sauces.

We hope to see everyone again at EMCFest 2023!



2022 IAS Annual meeting



Invitation Message for 2022 IAS Annual Meeting

Dear Electrical Colleagues:

We are excited to invite your attendance and participation at the IEEE's 57th IAS Annual Meeting to be held October 9-13, 2022. The conference will be in Detroit, Michigan USA.

The IAS Annual Meeting has established a long tradition of providing a platform for practicing engineers, researchers, and technical experts to present and discuss current developments and future trends in applications of electrical technology to fields such as electrical standards, industrial and commercial power systems, data centers, process controls, robotics and automation, electrostatics, mining, metals, smart grid, smart cities, and smart manufacturing.

Our conference venue and meeting space will be at the world-class Detroit convention center, which has been newly renamed as "Huntington Place". City of Detroit is known for being historical birthplace of the modern automobile industry. Our IAS Annual Meeting will be co-located with the 2022 Energy Conversion Congress and Exposition (ECCE). IAS Annual Meeting delegates are invited to attend some selected ECCE activities, such as the Monday Plenary Session and the ECCE Technical Expo, which are open to attendees from both conferences. With such a great setting for our two conferences, there will be ample opportunities for attendees to enjoy social events and networking amongst other engineers, industry folks, academic faculty, and of course students.

Our "Call for Papers" with deadline dates has been posted on our conference website at: <https://ias.ieee.org/2022annualmeeting/call-for-papers.html> It incorporates a "Call for Tutorials" as well. And for more general information regarding the overall conference, please visit the conference website at: <https://ias.ieee.org/2022annualmeeting>

On behalf of the entire conference organizing committee, we look forward to your participation in the 2022 IAS Annual Meeting!

Sincerely,

David Eng
General Chair, IAS AM-2022
Email: engdd412@ieee.org

WIE Activity

Data Science & Visualization Academy (JULY 18 - 22 | 10 AM-12 PM AND 1- 3PM DAILY)**CURRICULUM**

	MONDAY: DR. R.B. CHINNAM	TUESDAY: DRS. Y. LIU & S. MASOUD	WEDNESDAY: DRS. M. YILDIRIM & S. MASOUD	THURSDAY: DRS. E. DALKIRAN & A. MURAT	FRIDAY: DR. R.B. CHINNAM & INDUSTRY SPEAKERS
10 AM-12 PM TOPICS	<ul style="list-style-type: none"> PROGRAM OVERVIEW VISUALIZATION 	<ul style="list-style-type: none"> EXPLORATORY DATA ANALYSIS MODELING: STATISTICS 	<ul style="list-style-type: none"> MODELING: STATISTICS + MACHINE LEARNING 	<ul style="list-style-type: none"> DECISION SUPPORT OPTIMIZATION PRESCRIPTIVE ANALYTICS 	<ul style="list-style-type: none"> INDUSTRY GUEST SPEAKERS VIRTUAL FIELD TRIP CAREER ADVICE
1-3 PM ACTIVITY	<ul style="list-style-type: none"> TEAM FORMATION PROJECT GOALS & OBJECTIVES REVIEW DATASETS 	PROJECT WORK			<ul style="list-style-type: none"> TEAM PRESENTATIONS AWARDS

LOCATION

ONLINE SESSIONS USING ZOOM, CANVAS COURSE MANAGEMENT SOFTWARE, AND VDI VIRTUAL COMPUTING PLATFORM ([PRELOADED](#) WITH ALL NECESSARY SOFTWARE AND DATASETS)

FORMAT

HIGHLY EXPERIENCED FACULTY TEAM AND TEACHING ASSISTANTS BRING A MIXTURE OF THEORY SESSIONS DURING THE MORNING HOURS WITH AFTERNOON SESSIONS DEDICATED FOR PROJECT WORK. STUDENTS PRESENT THEIR PROJECT WORK AND FINDINGS ON THE LAST DAY OF THE PROGRAM.

ELIGIBILITY

HIGH SCHOOL STUDENTS CURRENTLY ENROLLED IN GRADES 9-11 WITH A STRONG BACKGROUND IN MATH AND INTEREST IN DATA ANALYTICS. PREVIOUS UNDERSTANDING OF STATISTICS IS PREFERRED. STUDENTS MUST BE OPEN TO THE CHALLENGE OF A RIGOROUS CURRICULUM.

COST

\$50 TO STUDENT WITH THE REST OF THE COST COVERED BY SPONSORS UNDER SCHOLARSHIPS.

AWARDS

SCHOLARSHIP OPPORTUNITIES AND OTHER PRIZES FOR BEST RATED TEAMS!

CONTACT

DR. RATNA CHINNAM
PROFESSOR & CHAIR
RATNA.CHINNAM@WAYNE.EDU

JASMINE ROBERTSON
DIRECTOR OF COMMUNITY ENGAGEMENT
JASMINE@WAYNE.EDU

2022 Volunteers

Now is the time of year when we all get to sit back, relax and begin to plan ahead for the fall term. Part of that planning may involve volunteering to support one of the functions of the local elements of your IEEE Section.

There are several:

Most of our Chapters and Affinity Groups have vacant positions in their officer roster. When a position is vacant, that means that other officers, often the Chair, must step in and handle the duties and functions that normally would be the tasks for the officer who is 'missing' from the roster.

The same can be said of our Section Standing Committees. Many (most) have vacant positions which either requires extra work from the other officers or goes undone. In our Geo-units (Affinity Groups and Chapters) as well as our Standing Committees we form teams to accomplish the primary goals and tasks. And, just as we don't build a machine with extra parts just to look good, those team positions have specific tasks needed to allow the team to function and accomplish its purposes.

So, how do you find out what teams need assistance, and what are the specifics of individual team jobs.

Glad you asked! The listing of teams at all levels of our Section are found in the Organization Roster at:

https://r4.ieee.org/sem/wp-content/uploads/sites/6/2022/04/Organization_Roster_04.12.2022_Rev0-1.pdf

Look for Committee, Affinity Group and/or Chapter officer titles that have no name beside the title and are filled either with a red or yellow highlight. Those are vacant positions. Contact the Chair of those organizations to let them know of your interest and willingness to help out.

For descriptions of the duties and functions of each job in the roster, refer to the Volunteer Portal in the SEM Website under the About SEM TAB. <https://r4.ieee.org/sem/about-sem/volunteer-portal/>

The link above will take you to that page.

If you need training, or a refresher on the duties of each position, refer to the listing of training modules that may be found on the 'About SEM' TAB of the SEM Website at 'Training Materials'. See the web link below:

<https://r4.ieee.org/sem/about-sem/training/>

All these resources may be found on the IEEE SEM Website at: <https://r4.ieee.org/sem/>

Much time and thought has gone into building this Website and while several areas need to be updated, the bulk of the material is still valid, and useful. Please avail yourself of the resources it contains.

If you become lost, or need assistance finding specific material, please contact any one of the officers listed in the Organization Roster and they should be able to help you to your goal.

Thank you.

kw k.williams@ieee.org

HamVention 2022

This year was my first adventure attending Hamvention. Looking back on my 64 years as an Amateur radio Operator it is amazing that life, career, family and other 'stuff' prevented me from attending in the past. However, after experiencing Hamvention for myself, I can state that it likely will not be the last.



The 'crowd' that gathered in Zina, Ohio for this year's Hamvention was friendly, courteous, attentive and fascinated by Ham radio and this event offered a taste of all aspects of the Amateur Radio Service.

A very few remained 'masked' out of an abundance of caution while most wandered about just enjoying the great weather and each other's company.

For Morse code (CW) enthusiasts where else in the world would you be able to try out almost every

possible Morse code 'Key' type and all the possible variations on key styles and knobs to find just the right 'fit' for your 'fist'. Every key that I have ever hear of from Straight keys to Sideswipers, Bugs and Paddles of every make, color and in every shape.

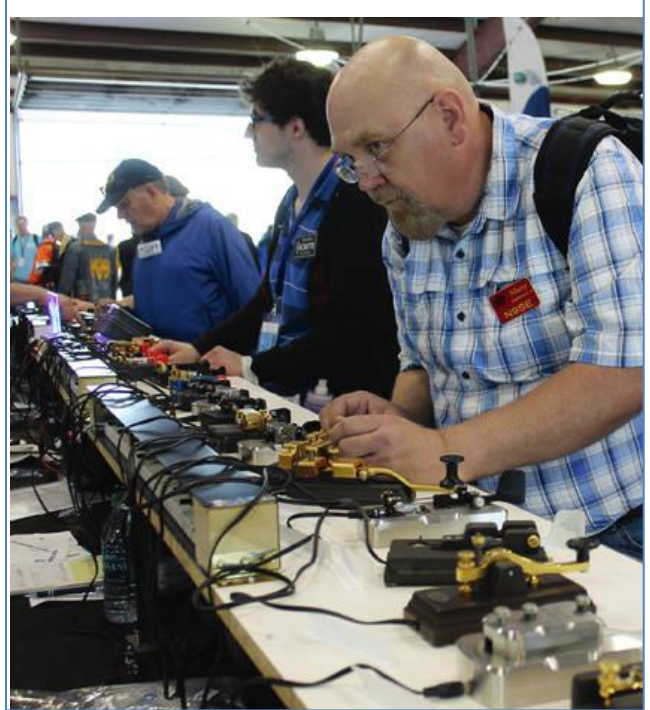
And if shopping for 'bargains' is your bag, grab a bag and wander through the many opportunities at the outdoor 'flee market' where just about anything you can think of associated with radio, electronics, audio, equipment, including lots of still good older 'rigs' we lovingly call 'boat anchors'.

Gathering of friends from all over were seen such as this group from the Long Island CW Club.



A good time was had by all, and I can hardly wait for Hamvention 2023!

Kw N8FNC



SEM STEM

Before the Global Pandemic put a stop to face-to-face activities members of the Southeastern Michigan Section – Education Committee were actively putting on programs for children and adults at libraries around our area. The specialty of STEM educational experience is in its ‘Hands On’ aspect in which students, young and old, have the opportunity to experience the physical reality of working with the forces of nature to actually ‘feel’ the pull of a magnetic field, or see a standing wave demonstrated in a spinning rope or watch a wave propagate along a stretched out ‘slinky’.



That intimate physical experience is something that can be approached through a ‘virtual’ class but until the student holds the objects in his or her hands, it never quite makes the complete impression that ‘doing it yourself’ can convey. We have attempted to come close in our ‘demonstration’ videos, but their greatest successes have been as guiding students to the details of how to duplicate the experiments on their own, or clearly demonstrating that you should ‘Never Try This at Home!’ when it illustrates a potential safety hazard that they might not be aware of at first glance.



In past years we had several industrial sponsors who graciously provided funding for equipment that allows students to recreate their own experiences under the direct supervision of an experience engineer (see above) in safety and in a friendly environment. We need to reestablish those connections again.

Small classes where everyone helps everyone else learn and grow is an optimal experience and something that is easy to achieve in the library environment. (see the picture on left).

However, the pandemic and its isolation requirements put a hold on these ‘in person’ classes but, the Section is now bouncing back and we hope to do the same with IEEE Sponsored STEM classes of all types.

The current listing of the Education Committee in our Section Organization Roster is shown at the right, and we have several critical blank posts which need to be filled, and soon, if we are to move forward with a viable program for teaching engineering STEM here in Southeastern Michigan. In addition to the obvious ‘gaps’ showing where an officer ‘post’ is clearly vacant at this time, we also need each of the current listed EdCom members to verify their continued interest, and willingness to assist the committee as a whole to begin it work again, and help put our Section program back on its feet.

Education Committee (EdCom):	
Chair	
Secretary	Malcolm Lunn
Temp V-Ch	Benjamin Sweet
Section STEM Coordinator	
Bacon Library Coord	Barry Steltz
CKL Library Coord	
Future Cities Coord	Don Bramlett
Library Science Coord	Candace Suriano
Science Fair Coord	Don Bramlett
Rofobest Coord	Chan-Jin Chung
Unassigned	Lin Van Nieuwstadt

Much has changed in our world due to the global pandemic and its effects on all of us, how we conduct our affairs, our communications, our businesses, and our lives in general. It is entirely likely that changes in how we go about conducting our STEM programs will also need to change. To take us through that change process we will need to find leadership to bring the Education team back together and develop new approaches and methods of both teaching STEM topics but also reaching out to students who may not have any idea what STEM training is all about.

At this time we are reaching out to our Section membership and asking for volunteers to let us know that you would be interested in either helping reconstitute the SEM EdCom. Contact Kimball Williams k.williams@ieee.org to let us know of your interest.

Chapter of the Year award!



CONGRATULATIONS to our Southeastern Michigan Computer Society technical chapter for winning **both** the 2021 Chapter of the year award **as well as** the CS chapter industry engagement award! Please join me in applauding the team behind Chapter 5.



2021 Outstanding Chapter Award

presented to the

IEEE Computer Society Southeastern Michigan
Section Chapter

*"For the Computer Society Professional Chapter providing the best overall set of
programs and activities for its local members"*

Melissa A. Russell, Executive Director
Dec 2021



*2021 Outstanding Chapter Award
for Industry Engagement*

presented to the

IEEE Computer Society Southeastern Michigan Section
Chapter

*"For the Computer Society Professional Chapter providing the best programs
and activities to encourage industry engagement"*

Melissa A. Russell, Executive Director
Dec 2021

Curated by

Sharan Kalwani,
Co-Editor, Wavelengths,
2017~2018~2019~2020~2021~2022
Email: Sharan.Kalwani@ieee.org

Member News



At the recent Engineering Society of Detroit March GOLD award ceremony (done online), our IEEE Section as an Affiliate member, participated and honored several of our members for their support.

Chief among these were 4 honorees recognized by Chapter 5 for their support. They were:

- 1) [Dave Robins of Intrepid Control Systems](#)
- 2) [Benjamin Sweet of MathWorks](#)
- 3) [Jacon Beningo of Beningo Embedded Group and](#)
- 4) [Atilla Bulmus of Infineon](#)

Presented below are snapshots taken at the event. We will soon start our own video streaming service and host these and past events there.

As CEO of Intrepid Control Systems Inc, Dave Robins has established his company as the leader in automotive diagnosis instruments. He has consistently supported for more than 10 years the IEEE SE Michigan Computer Society Chapter organized annual Embedded System workshop.

Dave is being recognized for *Professional Achievement and Entrepreneurship in Embedded Systems.*




IEEE SE Michigan Computer Society Chapter Appreciation 2022
Dave Robins
 CEO, Intrepid Control Systems Inc.

As an embedded systems expert, Jacob works as a consultant, designer, developer and educator. He runs many tutorials on the latest topics every month, with hands-on and virtual courses. He has delivered many key educational sessions around the world and has been extremely supportive of the IEEE SE Michigan initiatives and the ESW events for the past 15 years.

Jacob is being recognized for *Technical Leadership and Excellence in Embedded Systems.*




IEEE SE Michigan Computer Society Chapter Appreciation 2022
Jacob Beningo
 Beningo Embedded Group

Atilla is a regular contributor, hands-on workshop instructor and educational supporter, who has supported the IEEE SE Michigan efforts in raising technology awareness, in many different ways, for the last 10 years. He is always very keen and motivated in sharing his knowledge and supporting education.

Atilla is being recognized for *Technical Excellence in Embedded Automotive/Computational Applications.*




IEEE SE Michigan Computer Society Chapter Appreciation 2022
Atilla Bulmus
 Infineon Inc.

Over thirty years of Software Engineering experience in Real-Time Embedded Software and Systems, including Product Development, Quality Assurance, Process Improvement. Experience also includes team management, leadership, and mentoring.

Ben is being recognized for *Technical Excellence in Embedded Automotive/Computational Applications.*




IEEE SE Michigan Computer Society Chapter Appreciation 2022
Ben Sweet
 MathWorks

IFIP Intelligent Vehicle Workshop



Second Workshop on Intelligent Vehicle Dependability and Security

IFIP Working Group 10.4

23-26 June 2022, Alexandria, Virginia USA (National Capitol Region)

The Intelligent Vehicle Dependability and Security (IVDS) project of [IFIP Working Group 10.4](#) (Dependable Computing and Fault Tolerance) will host its 2nd workshop in June 2022. This follows a successful [First IVDS Workshop](#), held (virtually) in January 2021. Working Group 10.4, through its workshops, its affiliations with larger conferences, and landmark publications by many of its members, has contributed significantly to both R&D and application of highly dependable and secure computing systems since its establishment in 1980.

Workshop Objective: The workshop focus is: “**How to Survive Cyber Attacks on Safety-Critical Functions of Intelligent Vehicles.**” Our objective is to discuss design solutions, quantitative cyber-survivability measures, verification and validation, and regulatory issues with regard to impact of cyber attacks on autonomous vehicle safety.

Specific topics and issues and other details concerning the workshop can be found [here](#).

The expected workshop outcome is a set of specific actions, both short term and long term, to achieve the IVDS project’s vision, mission and goals.

When: Thursday, 23 June (evening reception) to Sunday, 26 June noon (lunch).

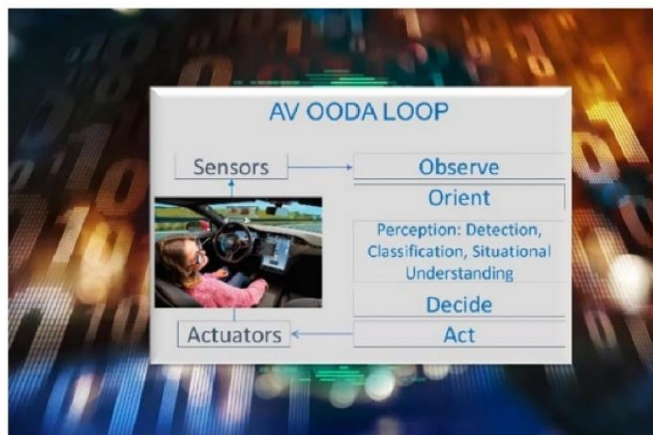
Where: [Hilton Old Town Alexandria](#), Virginia, USA.

Format: Each session will be organized as several presentations or a panel, followed by a lengthy discussion with presenters/panelists.

Registration & Fees: Workshop is limited to WG10.4 members and invited guests. This is an in-person workshop. There will be no virtual speakers or attendees. Registration fee TBD.

IVDS Project Vision: The vision of this project is the realization of highly dependable and secure operation of intelligent vehicles, verified and validated with respect to quantifiable dependability (particularly safety) and security requirements by rigorous state-of-the-art methods. Types of vehicle intelligence assumed in the vision are principally those associated with SAE Driving Automation Levels 3-5. Additional information regarding the project’s activities can be found on the [IVDS Project home page](#).

Organizing Committee: Dr. Jaynarayan Lala, jay.lala@rtx.com (Project Lead); Prof. John Meyer jfm@umich.edu, Prof. Carl Landwehr carl.landwehr@gmail.com, Dr. Charles Weinstock weinstock@conjelco.com, Prof. Homa Alemzadeh ha4d@virginia.edu, Prof. Cristina Nita-Rotaru c.nitarotaru@northeastern.edu and Dr. Wilfried Steiner wilfried.steiner@tttech.com



ORG UNITS cheat sheet

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit 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

Section Unit Name or Affinity Group or Chapter Name (Organizational Unit 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)

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

Organization Unit IEEE Code	Student Technical Chapter name
SBC00531	University of Detroit-Mercy, Computer Society Chapter
SBC02251	Wayne State University, Computer Society Chapter
SBC03921	Lawrence Tech University, Computer Society Chapter
SBC06741	Oakland University, Engineering in Medicine & Biology

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 SE Michigan Education Society Chapter
Vice-Chair, IEEE SE Michigan Computer Society Chapter
Editor, Wavelengths,
2018~2019~2020~2021~2022

RoboFest Update

RoboFest Online World Championship Awards Ceremony 2022

The IEEE Southeastern Michigan Section, like previous years was a Bronze sponsor of RoboFest and attended the ceremony held virtually by LTU. Below is their acknowledgement of our support. We look forward to continue success of the event and our very own CJ, continuing his role as founder and most passionate supporter!



Little Robots, Big Missions



Home Volunteer About **Get Involved** Registration For Site Hosts eAcademy eNews Coach Login Prior Years
Online World Championship



Official Sponsors of the 23rd Annual Robofest 2022

Bronze Sponsors



www.ndia-mich.org



www.ibm.com



r4.ieee.org/sem/

Lawrence Technological University / Robofest / J-233 / 21000 W. Ten Mile Rd, Southfield, MI 48075
Dr. Christopher Cartwright, Director, ccartwig@ltu.edu
Elmer Santos, Assistant Director, esantos@ltu.edu
Shannan Palonis, Coordinator, spalonis@ltu.edu
Pam Sparks, Coordinator, psparks@ltu.edu
Dr. CJ Chung, Advisory Board Chairperson (Volunteer), cchung@ltu.edu

<http://www.robofest.net>

<http://facebook.com/robofest>

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 <http://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 space for online chat, discussions, connecting with other global IEEE entities, besides our local Michigan folks.

vTools Meetings:

<http://sites.ieee.org/vtools/>

Select “Schedule a Meeting” 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: You may need to copy the URL and paste it into your browser address bar.**

Send details to: wavelengths@ieee-sem.org OR letters@ieee-sem.org

.....

Michigan Institute for Plasma Science and Engineering: Seminars for the 2021-2022 academic year:

https://mipse.umich.edu/seminars_2122.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/ea/ea-chapters/find-an-eaa-chapter>

Robots

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

Science Fiction Conventions

<https://2021.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/>

Executive Committee

The SEM Executive Committee is the primary coordination unit for Southeastern Michigan (SEM) IEEE operations. The basic organization chart below shows the 2019/2020/2021/2022 arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month on 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: <http://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.

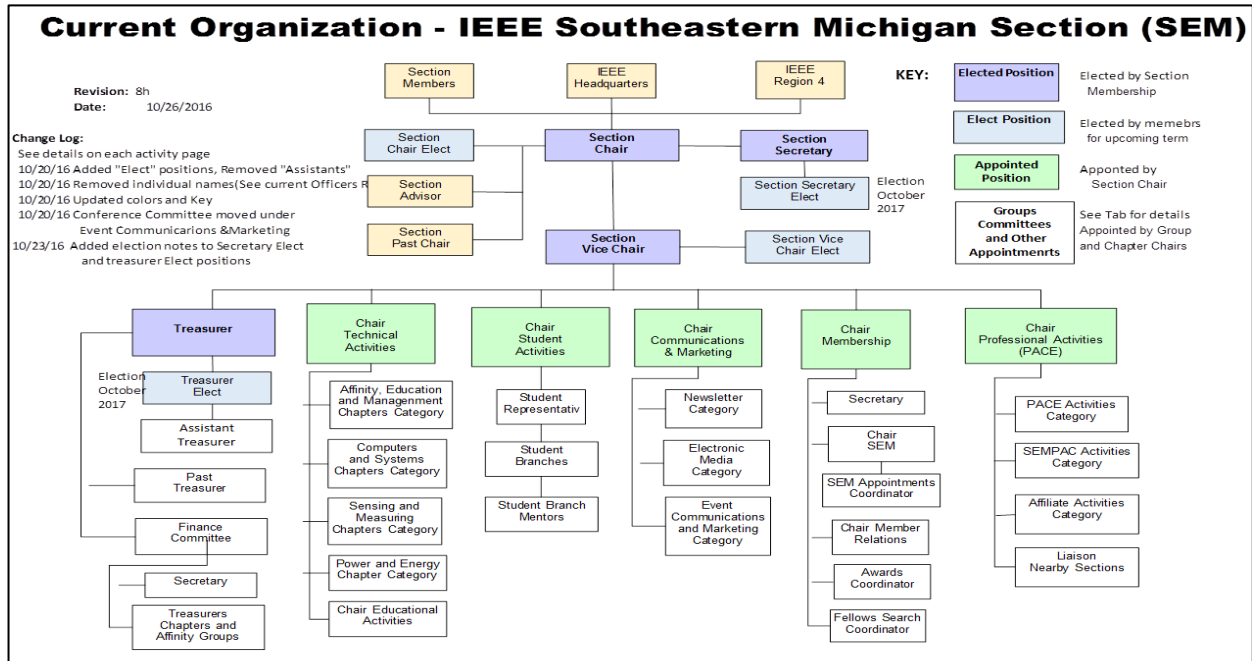
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to 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: <http://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 will be made available soon at <http://r4.ieee.org/sem/> . In the meantime, you may use the diagram below (soon to be refreshed!)



ExCom Meeting Schedule

NOTE: All SEM members are invited to attend ALL ExCom (Executive Committee) meetings:

Below is the 2022 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 2022 meetings. Or, link your personal calendar to the SEM Web calendar.

Section Administrative Committee (ExCom) Meeting Schedule for 2022:

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 in **Bold**.

<i>ExCom Meeting</i>	<i>Date & Time</i>
June 02,2022 - SEM Section ExCom Monthly Meeting (Teleconference) for June 2022 https://events.vtools.ieee.org/m/289870	6:30 PM
July 07,2022 - SEM Section ExCom Monthly Meeting (F2F) for July 2022 https://events.vtools.ieee.org/m/289871	6:30 PM
August 04,2022 - SEM Section ExCom Monthly Meeting (Teleconference) for August 2022 https://events.vtools.ieee.org/m/289872	6:30 PM
Sept 01,2022 - SEM Section ExCom Monthly Meeting (Teleconference) for September 2022 https://events.vtools.ieee.org/m/289873	6:30 PM
October 06,2022 - SEM Section ExCom Monthly Meeting (Teleconference) for October 2022 https://events.vtools.ieee.org/m/289875	6:30 PM
Nov 03,2022 - SEM Section ExCom Monthly Meeting (Teleconference) for November 2022 https://events.vtools.ieee.org/m/289876	6:30 PM
Dec 01,2022 - SEM Section ExCom Monthly Meeting (Teleconference) for December 2022 https://events.vtools.ieee.org/m/289877	6:30 PM

Christopher Johnson (Secretary)

Email: secretary@ieee-sem.org

Editorial Corner

Previous editions in this series may be found on the IEEE SEM website at: <http://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

d.romanchik@ieee.org

nilesh.dudhaia@ieee.org

k.williams@ieee.org

cjohnson@ieee.org

lunnmalcolm@me.com

akio@emcsociety.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

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	New Year Officers	Officer's Welcome	The Year Ahead	
Feb	Cons	2		MSU	Science Fair Judges	National Engrs Wk.	Surviving Winter	
Mar		3	13	EMU	Elections - Prep			
Apr		4		U/M-D		ESD Gold Awards	Chapter Focus	
May	Life	5	14			Science Fair		
Jun		6					Leadership Skills	
Jul		7	15				Students Issues	
Aug	WIE	8			Nominations Call		Womens Issues	
Sep		9	16	LTU	Ballots	Engineers Day?	Professional Skills	
Oct		10		U/M-AA	Elections!	IEEE Day		
Nov	YP	11	17	WSU	Election Results	New Fellows		
Dec		12		U/D-M	IEEE-Com Apmts.		Happy Holidays	R4 Nom

Wavelengths Annual Publication Plan for Personal Profiles

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



Web & Social Sites

SEM Website

<http://r4.ieee.org/sem/>

Each of the sites below may be accessed through the SEM 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 Workspace (new)

<https://iee-collabratec.ieee.org/app/workspaces/5979/IEEE-Southeastern-Michigan-Section/activities>

SEM Officers:

For a complete listing of all - Section - Standing Committee - Affinity Group - Chapter and Student Branch Officers, see the SEM Officers Roster on the SEM web pAdvertising Ratesout SEM” button and select “Organization Roster”

Section Officers

Section Chair

Sharan Kalwani

Section Vice-Chair

Mohammad Berri

Section Secretary

Chris Johnson

Section Treasurer

Ramesh Sethu

Standing Committees:

Section Adviser

Don Bramlett

Wavelengths Editor

Sharan Kalwani

Chair Educational

Christopher Guirlanda

Chair Finance Committee

Subra Ganesan

Chair Membership

Development
Mohamad Berri

Chair Nominations & Appointments

Kimball Williams

Chair PACE

Sharan Kalwani

Chair Student Activities

Mel Chi

Student Communications Coordinator

Michael Anthony

StuWeb & Social Sites *Open!*

Chair Technical Activities

Jeffery Mosley



IEEE Southeastern Michigan

Visit Us on the Web at:
<http://r4.ieee.org/sem>



Advertising Rates

SEM Website & Newsletter

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:

- 1st Thursday of Each Month @ 6:30 PM
- Check the Section Web Calendar at:
<http://r4.ieee.org/sem/sem-calendar/>
(Select the “SEM Calendar” button in the top row.)

SEM Executive Committee Meetings:

- 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
<http://r4.ieee.org/sem/>
(Select the “SEM Calendar” button in the top row.)
- Registration for all at:
<http://bit.ly/sem-upcoming>