Wavelengths

IEEE Southeastern Michigan
Electrical and Electronic Engineers Creating Our Future

Volume 61 – Issue 9

Contents

Upcoming Events

We have a number of events coming up this month. Be sure to check out the Section Website: **https://r4.ieee.org/sem**
As well as vtools:
IEEE Region 4 - SE Michigan Section Upcoming
Listed below are some of the events, FYI.

Event	Date	Time
SEM Section ExCom Monthly Meeting (Teleconference) for September 2021	01 Sep 2021	06:30 PM
60 Years of Computing: Personal Perceptions	07 Sep 2021	06:01 PM
Ch8: AdCom Teleconference	09 Sep 2021	11:00 AM
Online World Robofest Sr. Exhibition Judging	10 Sep 2021	08:00 AM
IEEE SEM Senior Member 'Roundup' (a Virtual Event!)	11 Sep 2021	09:00 AM
Henry Ford Estate – Thomas Edison Hydro plant Tour 2021	24 Sep 2021	11:00 AM
Future of Computing in the "Post Moore's Law Era"	28 Sep 2021	06:00 PM
EMC Fest	12 May 2022	08:00 AM

Note: All times are EST/EDT unless otherwise marked. Accurate at the time of going to press. If any events are missed do kindly bring them to the attention of wavelengths @ieee-sem.org. Thank you!

Chair Person's Column

Welcome to the September edition of the Wavelengths. This month we are featuring a Senior Member elevation event. Senior Member is a title that must be applied for by an individual once that have achieved 10 years of experience, with credit for advanced degrees, and can demonstrate significant contributions to our industry. I encourage every member who meets those qualifications to apply. The application requires 3 existing Senior Members to provide a reference. This event helps to connect you with the references and streamlines the application process.

This issue also features profiles of 3 of our Chapters. Getting involved with Chapters is a great way to get connected. Our Section features 17 different Chapters and several Affinity Groups that all have different focus areas. A complete list is available in this Wavelengths. Feel free to reach out if you want any additional information.

While you here, be sure to check out the Embedded Systems Workshop that is taking place virtually. It continues to be one of the premiere events in our Section. It's now in its 19th year. There is a small fee to attend, but I hear there will be door prizes!

Thanks to the amazing team of volunteers that we have in this organization. I look forward to seeing everyone (virtually) soon!

David Mindham
dmindham -At- ieee.org

SusTech 2022 CFP

IEEESusTech2022

https://ieee-sustech.org   **Call For Papers**   April 21st-23rd, 2022

The **9th Annual IEEE Technologies for Sustainability Conference** (SusTech 2022) is designed to explore technical development that meets the needs of the present without compromising the future generations. The conference brings together scientists, engineers, technologists and scholars from disparate disciplines to conduct a dialogue on environmental issues and collaborate on ideas to develop and utilize innovative tools and intelligent systems to address them. Attendees will explore emerging relevant technologies, latest tools, and proactive solutions to take their sustainability programs to the next level.

- **SusTech 2022** is a virtual and on-demand event and will feature technical papers & presentations, posters and workshops.
- Prominent experts will be giving keynotes, plenary presentations and invited talks.
- Best Posters and Papers in the conference will be eligible for an award.
- Full papers will be considered for publication in the IEEE SusTech 2022 Proceedings.

Conference content that meets IEEE quality review standards and format will be submitted for inclusion into IEEE Xplore as well as other Abstracting & Indexing (A&I) databases.

Papers are solicited for presentations from industry, government, and academia (including students) covering relevant research, technologies, methodologies, tools, case studies and public policy.

Conference Fields of Interest (see web site for full details)
Technologies that drive sustainable infrastructure design and implementation

Energy Efficiency	**Sustainable Electronics**	**Smart Grid**
Renewable/Alternative Energy	**Water Resource Management**	**Internet of Things (IoT)**
Intelligent Transportation Systems	**Societal Implications/Quality of Life**	**Public Policy**

The Conference will also consider submissions representing: Smart Grid, e-Waste, Ocean Waste & Pollution, Ecological Sustainability & Conservation, Agriculture & Food Technology, Sustainable Management.

Instructions to Authors: Submit in **PDF** form, a full submission of the paper for oral presentation via the SusTech website. For information for authors, please visit the conference website at **https://ieee-sustech.org**. Select the Authors *tab* and follow the instructions.

There will be a separate Student Poster Competition.

Important Dates	November 1st, 2021	Submission Deadline for Paper
	December 15th, 2021	Notification of Acceptance
	January 31st, 2022	FINAL manuscript submission deadline

For more information or questions, please contact: sustech@ieee.org

SusTech 2022 Leadership
General Chair: David E. Gonzalez | davidgonzalez@ieee.org
Vice Chair: Sharan Kalwani | sharan.kalwani@ieee.org
Technical Program Chair: Rakesh Mahto | ramahto@fullerton.edu
Past Chair: Gora Datta | gora.datta@ieee.org
Emeritus Chair and Co-Founder: Ed Pekins | e.perkins@ieee.org

IEEE Environmental Engineering Technical Community

Embedded Systems 2021

OAKLAND UNIVERSITY   IEEE Southeastern Michigan   IEEE computer society

19th Annual Embedded Systems Workshop

October 23 & 30, 2021, 8:00 a.m. to 12:45 p.m. (Saturdays)
Virtual/Online Live Sessions, EST/EDT Time Zone

IEEE Computer Society & IEEE Education Society (South East Michigan Chapters) is offering a TWO half-day set of workshops on Embedded Systems on Saturday, October 23rd and 30th, 2021. This workshop is open to all industry professionals, both experienced and newly minted engineers, as well as students. This is the 19th year that the event is being held. The theme for this year is: "Role of Embedded Systems in Battery Electric Vehicles (BEV)".

The aim is to disseminate knowledge, directly benefitting the IEEE members, at the same time **improve the technology skills pool, indirectly boosting the economy**. Speakers and experts from the embedded systems industry will be making presentations, and will also be available for discussions and networking throughout the day. In addition to the technical presentations, there will be industry interaction and potential recruitment sessions. Use this opportunity for virtual networking with engineers, industry experts and embedded enthusiasts.

Please confirm your participation by registering on the IEEE events web site
Deadline is 17th October 11 pm
https://bit.ly/embed2021

Venue: Virtual using Video Conferencing

Sponsors in the past: Beningo Embedded Group, Infineon, TeKnowledge, Intrepid CS and many others...

Attendees: There is a small one-time cost of $5 to attend, this will help cover door prizes, video recording, storage, presentations, a dedicated website and other logistics. Several random raffles representing the embedded systems industry will also take place. All are welcome. Do post this flyer in your workplaces, share/inform your peers & colleagues about this event. It is a great way to learn not only what is going on, but also network (virtually) with other professionals as well.

Brought to you by the IEEE SE Michigan Computer & Education Society chapters. Do seriously consider joining the IEEE, boost your technical skills, broaden your awareness of compute-based engineering in the region, support numerous similar initiatives & learn other benefits this brings.

Open to all, Pre-registration is necessary prior to attending! The deadline to register is 17th October 11 PM

For Technical questions, contact the Program Committee at: esw2021@ieee-sem.org

A CEU/PDH Certificate will be made available for participants who Pre-register and attend both days!

ESW 2021 Organizing Committee: Subra Ganesan (Chair), Sharan Kalwani (Vice Chair), Ramesh S, Carla Gerst, Nilesh Dudhaia, Praveena Jakkula, Sreenivas Eeshwaroju and Ben Sweet

Technical Activities Report

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
							2021 IEEE SE Michigan Section Geo-unit Status (Till Aug 28th)		
Cnslt	20	1	1	5	1	0	**Consultants Network**	0	7
LIFE	0	0	0	0	7	0	**Life Members**	0	7
WIE	0	0	0	7	2	0	**Women In Engineering**	0	9
YP	0	0	0	0	0	0	**Young Professionals**	0	0
1	0	0	0	0	0	0	**Circuits & Systems, Signal Proc., Info Th.**	5	0
2	40	9	3	1	0	0	**Vehicular Technology**	0	4
3	103	37	3	0	0	0	**Aerospace & Elec. Sys., Communications**	0	3
4	29	9	2	0	0	0	**Trident (Ant, Elect Dev., uWave, Photo)**	0	2
5	30	1	40	5	5	2	**Computers**	1	52
6	0	0	0	0	0	0	**Geoscience & Remote Sensing**	0	0
7	40	5	6	2	0	0	**Power Engineering, Industrial App.**	0	8
8	90	37	12	7	0	0	**Electromagnetic Compatibility (EMC)**	2	19
9	48	14	2	1	0	0	**Power Electronics, Industrial Electronics**	0	3
10	4	0	2	1	0	0	**Engineering Management**	0	3
11	0	0	0	0	0	0	**Eng. in Medicine & Biology**	0	0
12	30	1	1	3	0	0	**Control Systems**	0	4
13	37	2	15	1	2	0	**Education**	0	18
14	0	0	0	0	1	0	**Robotics & Automation**	0	1
15	69	43	4	0	0	0	**Nuclear Plasma Science Society**	1	4
16	0	0	0	0	0	0	**Computational Intelligence / Sys.Man.Cyber.**	0	0
17	21	17	3	0	0	0	**Nano Technology Council**	0	3
SEM	26	2	2	6	3	1	**SEM (Section)**	9	12
Tot	585	178	96	39	21	3	**NOTE: Highlight Green = Active**	18	159
		30%					**NOTE: Highlight clear = Concern**		

In a recent update of the 2021 vTools meeting records we noticed that several Chapters have meeting(s) listed in the Section Health report that show up in the 'Not Reported' column. If your chapter or affinity group is part of the list, please take action appropriate to the circumstances about these meetings. Messages to affected GAs have been sent out as of last week. Please correct the errors as needed per the following instructions.

Complete Report:
You can quickly complete the 'Report' process by using the URL to open the Event and your IEEE credentials to access the control tools.

- Click on the 'Manage this Event" button, scroll to the bottom of the screen
- Click on the "File Report" button at the lower left.
- Enter the # of IEEE members and the # of guests,
- Click on 'Submit' and you're done!

Canceled without any Registrations:
If a vTools event is called off, and no one has already registered, you can remove it from the records by

- 📖 Using the 'Manage' tool, 'Editing' the file, and
- 📖 Saving it as 'Draft' removes it from the records.

Canceled with Registrations:
If a vTools event is called off, but you have registrations,

- 📖 Use the "Cancel" button and to give the members notice of the action.
- 📖 Give them a few days then go ahead and
- 📖 Save as Draft to remove it from the records.

Thank you for your efforts this year and be sure to let us know if we can assist you. Our Section still needs to support our Affinity Groups and underperforming technical chapters and societies. I am hoping to reach 100% of our technical meeting goals by this Fall. If you are available and wish to help please contact me at jvmosley@ieee.org. Thank you

Jeff Mosley
TAcom Chair
IEEE R4 SEM

Member News

Congratulating CJ Chung on completing 23 years at LTU!

The IEEE Southeastern Michigan Section all would like to congratulate CJ Chung on achieving 23 years at Lawrence Technological University.

A little bit about "CJ":

Chan Jin "CJ" Chung attended HongIk University in Seoul, Korea, where he earned a B.S. Computer Science degree. While he was working for Electronics and Telecommunication Research Institute (ETRI) from 1982 to 1992, he was involved in developing TDX switching systems that became later the base system for the first commercialized CDMA system in the world. Chung also worked as a visiting researcher for a year to develop AXE switching system software modules for L.M. Ericsson in Sweden in 1984. He received his Ph.D. in Computer Science from Wayne State University in 1997. His doctoral research was the development of a self-adaptive system motivated by cultural evolution process, which was then applied to solve various optimization problems. His research interests include evolutionary computation, cultural algorithms, evolutionary-neuro-fuzzy algorithms, evolutionary robotics, autonomous vehicles, cyber physical systems, software engineering for robotics, and robotics in education. Currently, he leads ACTor (Autonomous Campus Transport/Taxi) project.

Prof. Chung founded a computer science oriented robot competition, Robofest (www.robofest.net). Over 20,000 students from 14 States in the US and 17 countries have competed in Robofest since 1999. He launched numerous STEM programs such as RoboParade in 2006, VCC (Vision Centric Robot Challenge) in 2007, and GRAF (Global Robotics Art Festival) in 2013. He is a faculty advisor of Lawrence Tech's IGVC (Intelligent Ground Vehicle Competition) teams. His BigBoot II team won Grand Award with LESCOE Cup in 2016. He served as the USA National Organizer for World Robot Olympiad in 2014 and 2015.

He received The Mary E. and Richard E. Marburger Distinguished Achievement Award in 2007 at LTU. In 2011, IEEE USA honored Dr. Chung with its citation of honor award for his leadership in founding the Robofest competition to inspire interest in engineering among pre-college students.

His LTU web page is located at: *http://qbx6.ltu.edu/chung*

Or

You can personally wish him at his LinkedIn profile: *https://www.linkedin.com/in/cjchung1/*

60 years of computing

IEEE SE Michigan
Presents
"60 years of computing: Personal Perceptions"

It is said that many new ideas are actually "old wine in a new bottle". Sometimes that applies to computing as well. Mitch Goodkin, will share with us, his journey of the last several decades in computing, how it has changed and insights into the workings. It is always good to learn from history, as sometimes something truly fascinating emerges and can be re-applied to modern day hurdles.

Speaker Bio:
Mitch Goodkin has a J.D., M.B.A., B.S. (General Engineering) and M.S.E (Computer Science and Engineering); and previously received electronics, computer maintenance, and instructor training in the USAF. Mitch is a retired attorney and Licensed Professional Engineer. He is a Senior Life Member of the Institute of Electrical and Electronic Engineers and a Senior Life Member of the Society of Manufacturing Engineers. He also is a member of the honor societies for engineering (Tau Beta PI) and business (Beta Gamma Sigma). Mitch is a past Chair of the Information Technology Law Section of the State Bar of Michigan. He has been a mentor for many years with SCORE, a nation-wide non-profit organization that provides free counseling to small businesses.

At Glance

- **When:**
  Date: September 7, 2021
  Time: 6:00 – 7:20 PM EST/EDT

- **Where:**
  Online (requires a pre-confirmed registration)

- **Audience:** All eligible members and potential members (only if slots available)
  *

Sponsored by IEEE SE Michigan Computer Society Chapter

Pre-Registration Required!

https://events.vtools.ieee.org/m/275176

**IEEE
COMPUTER
SOCIETY**

Chapter 4 Profile

Introducing Chapter 4

Who we are: Chapter 4 (aka Trident Chapter) is our feature chapter for this month. Chapter 4 is a joint chapter between the Electron Device Society (EDS), Microwave Theory and Techniques Society (MTT-S), Antennas & Propagation Society (APS) and Photonics Society. The chapter is broadly interested in electronic and optical devices and systems.

Meet our Leadership: The officers of Chapter 4 are Becky Peterson (Chair), Anthony Grbic (Vice Chair for APS), Fan-Hsuan Meng (Vice Chair for EDS), Milad Moosavifar (Vice Chair for MTT-S), Somin Eunice Lee (Vice Chair for Photonics Society), Behnoush Rostami (Secretary), and Menglou Rao (Treasurer).
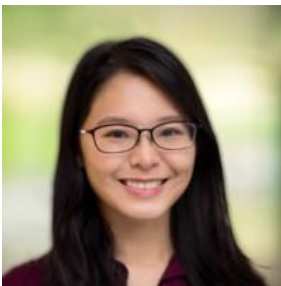
Becky (R. L.) Peterson is an Associate Professor of Electrical Engineering and Computer Science (EECS), Materials Science and Engineering, and Applied Physics at the University of Michigan. She is also the Director of U-M's Lurie Nanofabrication Facility. She received the B.S. from the University of Rochester, NY, M.S. from University of Minnesota-Twin Cities, and PhD from Princeton University, all in electrical engineering. Before joining U-M, she was a post-doctoral fellow at the University of Cambridge, UK Department of Physics. She is a Senior Member of the IEEE, and has received a DARPA Young Faculty Award and an NSF CAREER Award. She has served as the Technical Program Chair of the 2020 Device Research Conference and was Chair of the Optoelectronics, Displays and Imaging Committee for the 2020 IEEE International Electron Devices Meeting (IEDM). Her research focuses on oxide semiconductor materials and devices, encompassing thin film oxide electronic devices for active-matrix displays and back-end-of-line electronics as well as ultra-wide bandgap oxides for high power electronics.

Anthony (Tony) Grbic is a Professor of EECS and Applied Physics at the University of Michigan. He received the B.A.Sc., M.A.Sc., and Ph.D. degrees in electrical engineering from the University of Toronto, Toronto, ON, Canada before joining University of Michigan. He is a Fellow of the IEEE, and has received an AFOSR Young Investigator Award and an NSF CAREER Award, as well as the Presidential Early Career Award for Scientists and Engineers. He is currently an IEEE MTT-S Distinguished Microwave Lecturer. He served as Technical Program Co-Chair in 2012 and Topic Co-Chair in 2016 and 2017 for the IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting. He was also an Associate Editor for IEEE Antennas and Wireless Propagation Letters. His research interests include engineered electromagnetic structures (metamaterials, metasurfaces, electromagnetic band-gap materials, frequency selective surfaces), plasmonics, antennas, microwave circuits, wireless power transmission systems, and analytical electromagnetics/optics.

Fan-Hsuan Meng is a PhD candidate in Electrical and Computer Engineering (ECE) at the University of Michigan. She also works as a Senior Software Engineer at MemryX. Her work focuses on deep neural networks using RRAM architectures. She received her Bachelor's and Master's degrees in Electrical and Electronics Engineering, respectively from the National Tsing Hua University.

Milad Moosavifar a PhD candidate in Electrical and Computer Engineering (ECE) at the University of Michigan. His research focuses on high performance mmWave/RF/Analog system and circuit design in advanced CMOS/BiCMOS technology nodes, specifically developing novel architectures and circuits for energy-efficient RF/mmWave transceivers. Before coming to Michigan, he received his B.S. degree in Electrical Engineering (Electronics) from Sharif University of Technology, Tehran, Iran.

Chapter 4 Profile (contd)

Somin Eunice Lee is an Assistant Professor of EECS and Biomedical Engineering at the University of Michigan. She received an AFOSR Young Investigator Award and an NSF CAREER Award. She received B.S. and M.S. degrees in Electrical Engineering at the University of California, Davis and a Ph.D. degree in Bioengineering at the University of California, Berkeley as a Siebel Scholar. She completed her postdoctoral studies at Lawrence Berkeley National Laboratory as an NIH Ruth L. Kirschstein Postdoctoral Fellow. Her research interests lie in advancing innovations in nanoscale-dependent properties to enable unique spatial and temporal capabilities needed for quantification in bioscience and medicine.

Behnoush Rostami is a PhD candidate in Electrical and Computer Engineering at the University of Michigan. She received her B.S. degree in Electrical Engineering (Electronics) and M.S. degree in Electrical Engineering (Bioelectronics) from Sharif University of Technology, Tehran, Iran. She is currently working on design and fabrication of Sea-of-Electrode Arrays (SEA) for massive-scale, customizable neural recordings from 3-dimensionally complex brain regions. She was part of the 2020 Rising Stars program at the University of California, Berkeley.

Menglou Rao is a PhD candidate in Electrical and Computer Engineering (ECE) at the University of Michigan. She conducts research in the area of Applied Electromagnetics and RF Circuits. She was named the U-M EECS Outstanding Graduate Student Instructor (GSI) for Winter 2019, and was awarded Rackham Predoctoral Fellowship in 2021. Previously, she earned her Bachelor's degree in Electrical, Electronics and Communications Engineering at Beijing University of Posts and Telecommunications.

While we have a full roster of officers at present, we are always looking for energetic new members to join our team. Please contact becky.peterson@ieee.org.

What we did last year: In 2020 we held two virtual meetings. The first was a seminar by Dr. Jeremy Everard, a Professor at York University and an IEEE MTT-S Distinguished Microwave Lecturer. His talk was titled "Low Phase Noise Signal Generation Utilizing Oscillators, Resonators & Filters and Atomic Clocks." The second was a seminar by Dr. Jordan Budhu of University of Michigan on "Next Generation Metasurfaces: Multiband Passive Metasurfaces for Arbitrary Amplitude and Phase Control."

What we plan for 2021:
In March 2021 we held a virtual seminar with Distinguished Microwave Lecturer Bodhisatwa Sadhu from IBM T. J. Watson Research Center, Yorktown Heights, NY. His talk was titled "Silicon-based Millimeter-wave Phased Arrays for 5G: Fundamentals to Future Trends." We are currently working to schedule the second Distinguished Microwave Lecturer we were assigned by MTT-S for a seminar in Fall 2021. Watch your inbox for IEEE notices!

As travel resumes and we regain the ability to safely gather in person, we hope to add more seminars and events to our schedule. If you would like to suggest a speaker or joint event, please contact becky.peterson@ieee.org

Robotics Event

Robofest eNewsletter 08-04-21

Note: All times are listed in EDT unless noted

(1) Robofest 2022 World Championship Season Tentative Dates
We are excited to announce that the 2022 season will kick off with the following tentative dates:

Release of the International Game Rules	October 9, 2021
Kickoff meetings to review Game and general rules	10/29/2021, 11/12/2021 &1/15/2022
International Qualifiers Begin	November 2021
Release of final US Official Game Rules	January 15, 2022
Warmup Competition/Judge Training on LTU Campus	Feb 12, 2022
US Qualifiers Begin	February 26, 2022
World Championship at LTU	**May 12, 13 and 14, 2022**

(2) BottleSumo Day Camp for Beginners
There is space available for teams of 1, 2 or 3 students (team of 2 is recommended) in 4th through 11th Grades in the Beginner BottleSumo LEGO EV3 Robots with Scratch summer camp held in our Computer Science Robotics Lab on LTU campus. Wed. Aug 11, 9:00 am ~ 3:30 pm.
$20 registration fee per team / Bring your own lunch. More information can be found under Get Involved/ Camps on the Robofest.net website. https://robofest.net/index.php/current-competitions/camps0

(3) Robofest Online World Championship Schedule
Teams that have qualified to advance to ROWC are now being transferred to the **2021 Robofest Online World Championship** (ROWC) events. Please be sure to check your registration and make your $20 registration fee payment. More information will be sent directly to the coaches in the near future, so be sure to keep checking the email address you have associated with your Coach ID.

Start time of each event is 8:00 am EDT/12 pm GMT (Greenwich Mean Time):

Fri, Aug 20	Sr. UMC **REGISTRATION OPEN**	Fri, Sep 17	Sr. BottleSumo Time Trial, CL & UL
Sat, Aug 21	Jr. UMC **REGISTRATION OPEN**	Sat, Sep 18	Jr. BottleSumo Time Trial
Fri, Aug 27	Sr. & College RoboMed	Fri, Sep 24	Sr. Game, StackRolls
Sat, Aug 28	Jr. & Sr. RoboArts	Sat, Sep 25	Jr. Game, StackRolls
Fri, Sep 10	Sr. Exhibition		
Sat, Sep 11	Jr. Exhibition	Sat, Oct 2	Award Ceremonies

(4) Robofest eAcademy Learning Opportunities
Robofest would like encourage teams to utilize the Robofest eAcademy - a series of online classes developed by Robofest instructors. Courses are free through the Schoology Learning Management System. Schoology allows students to take classes on line where they can view course material, get assignments, and take quizzes to test knowledge. Access information for each class can be found on the Tech Resources page of the robofest.net website
Courses include:

Robofest 101: Introduction to Robot Mesh	RoboParade using VEX IQ Simulator
Game using VEX IQ and Robot Mesh	Exhibition Projects using LEGO EV3
Game using LEGO EV3 and RobotC	BottleSumo using LEGO EV3
Game using LEGO EV3	

Lawrence Technological University / Robofest / J-233 / 21000 W. Ten Mile Rd, Southfield, MI 48075
Dr. Christopher Cartwright, Director, ccartwrig@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, cchung@ltu.edu
http://www.robofest.net   http://facebook.com/robofest

Senior Elevation Event

IEEE SE Michigan Section
Presents
"Senior Membership Elevation Round Up: Part Trois"

IEEE Southeastern Michigan Section will reprise for the 3rd time, its Senior Member Round up event (virtual) on September 11th, 2021 between 9 AM and 11 AM (EST/EDT). Senior Member Reviewers will assist interested member candidates with significant years of experience in their profession.

The way it works is:
- At least a 10 years of significant experience with Bachelor's degree needs be established to initiate the senior elevation.
- If you have a PhD that is considered to be 5 years of significant experience, so you need 5 additional years beyond that.
- If you have a master's, that is considered to be 2 years of significant experience. So you will need 8 additional years to qualify.

There is no cost to becoming a Senior Member, and this step is a necessary prelude to seeking the IEEE 'Fellow' level. For a complete description of the Senior Member process and its benefits, see the link: **http://www.ieee.org/membership_services/membership/grade_elevation.html**

Potential senior members, please register on this site for the event and be ready with digital copies of your resume, and relevant supporting materials, to share with reviewers.
Existing Senior Members are requested to also register and assist potential new members with their application processing.

At Glance

- **When:**
  Date: September 11th, 2021
  Time: 9 am to 11 am

- **Where:**
  Online using Webex breakout rooms

- **Audience:** All Eligible Members, Senior members and Potential Members

- - - - - - - - - - - - - -
Sponsored by
IEEE
SE Michigan Section
Membership Development

Pre-Registration Required!
https://events.vtools.ieee.org/m/274895

IEEE Day 2021

About IEEE Day
IEEE Day is celebrating the first time in history when engineers worldwide and IEEE members gathered to share their technical ideas in 1884. Worldwide celebrations demonstrate the ways thousands of IEEE members in local communities join together to collaborate on ideas that leverage technology for a better tomorrow.

Theme
Now engraved in its essence, the IEEE Day's theme is: "Leveraging Technology for a Better Tomorrow". While the world benefits from what's new, IEEE focuses on what's next.

Date
IEEE Day is an annual event celebrated on the first Tuesday in October, IEEE Day 2021 will be held on 5 October. Celebrations can be held between 1 October and 17 October. To this end, we are inviting all members interested in helping to celebrate IEEE Day 2021 to add their names to this volunteer link and become an IEEE Day Ambassador. All IEEE members i.e. Senior member, Life member, Fellow, YP, students,… all can celebrate the day. Once can conduct photo, video contests, any local event which shows the value of IEEE. If you would like to see some of the events done last year during the pandemic – check out: https://ieeeday.org/eventslist-2020/.

Call for Ambassadors!
IEEE Day 2021 team is looking for enthusiastic Ambassadors from all of it's organizational units. This Ambassador program will provide an opportunity to volunteer with an international team for global exposure. Main job of an ambassador is to promote IEEE Day 2021 in their respective student branch, chapter, affinity groups and sections.

The CALL FOR AMBASSADORS program is now open for all the active IEEE Members! An Ambassador has to have active IEEE Membership for the year of 2021. So if you think you are interested, do not wait for the deadline. Go ahead and If you have any query, do not hesitate to contact Sharan Kalwani.

IEEE Day 2021 has lots of social media activity. Click on any of the icons below for the latest.

Life After Moore's Law

IEEE SE Michigan Computer Society Chapter
Presents
Future of Computing in the "Post Moore's Law Era"

The speculated ending of Moore's Law has created fear in the community. In the past few decades, the ending has been predicted on numerous occasions; namely, whenever a new daunting challenge was encountered. Is it really ending soon? We hope not, but it's a self-fulfilling prophecy; it will end for those who believe the ending is nigh, and can cause them to give up! This talk will revisit these historic predictions and their validity, the state and maturity of emerging devices in the context of the continuation of Moore's Law, and more importantly, the largely ignored, promising system-level opportunities and innovations intended to further Moore's Law, as well as how to continue to deliver unprecedented compute performance for years to come.

Speaker Bio:
Shekhar Y. Borkar is these days at Qualcomm. Formerly an Intel Fellow, where he was with the Corporate Technology Group and Director of Microprocessor Technology Lab. While at Intel (which he joined in 1981), he worked on the design of the 8051 family of microcontrollers, iWarp multicomputer and high-speed signaling technology for Intel supercomputers. He has published over 60 articles and holds 41 patents. Shekhar is originally from in Mumbai, India. He received a master's in EE from the University of Notre Dame (1981), and a master and bachelor in Physics from the University of Bombay (1979).

At Glance

- **When:**
  Date: September 28th, 2021
  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,
& Education Society
Chapters*

*Pre-Registration Required!

https://events.vtools.ieee.org/m/279663

IEEE Southeastern Michigan Section

IEEE Education Society

IEEE COMPUTER SOCIETY

IEEE Advancing Technology for Humanity

Officer Nominations:

By now, all SEM members who have not 'opted out' of receiving messages from local IEEE should have received the links to the survey form used to nominate candidates for Section Officer positions. (Executive Committee / Chapters / Affinity Groups – "**Geo-unit**")
Note: Student Branches and HKN Chapters arrange their own elections at times that seem appropriate for their circumstances.

Careful selection of candidates becomes the first step in electing competent leaders who will fulfil the duties of their office while learning all the ins and outs associated with any elected or appointed position. If good candidates are not nominated for election, there is no chance of their being elected! Simple logic tells us that.

Is your local Chapter or Affinity Group that represents the IEEE Society that aligns with you chosen professional path is doing a great job of finding good speakers and arranging for informative presentations, tutorials or classes, why not nominate them for re-election?

If your local Geo-unit officers have been doing nothing during the past year, why allow them to stay in office? It has been said: "The only thing required for evil to succeed is for good people to do nothing." The same can be said of poor or ineffective leadership.

If you look at the SEM Technical Activities report on page 5 and see few or no meetings recorded for your Geo-unit, download a copy of the SEM organization roster
(**https://r4.ieee.org/sem/wp-content/uploads/sites/6/2021/07/Organization_Roster_7.2.2021.pdf**)
and see the same officers in charge that have been doing nothing, consider a change.

Self Nomination:
For any member with grade of Graduate Student or above, one of the best opportunities for learning those 'Soft Skills' that eventually make or break an engineering career is to volunteer for election, or appointment to a position on a Geo-unit.

If you are lucky enough to join a Geo-unit or committee with competent officers they will encourage you to train in the many skills you will need, and point you to the available 'on-line' training in soft skills at the IEEE Center for Leadership Excellence. **https://ieee-elearning.org/CLE/**

The training is good and helpful. However, your 'homework' is the actual work you will do as a functioning part of the organization on a day to day basis. This is where you discover the subtle differences between your understanding of the formal 'lessons' and actual practice of the skills. Just like playing sport or a musical instrument.
You have to practice in order to have any real facility with the skill.

- Nominate at: **https://getfoureyes.com/s/a60uH/**

Chapter 7 Profile

The Southeastern Michigan PES/IAS Joint Chapter (#7) is a chapter of the IEEE Power & Energy Society and Industrial Applications Society. The Chapter covers the counties of Clinton, Eaton, Ingham, Jackson, Livingston, Macomb, Oakland, St. Clair, Washtenaw, and Wayne. Our over 300 members are industry leaders, practitioners, students, and academics with a common professional interest in electric power and energy and industrial applications. The Chapter holds numerous events throughout the year, including speakers and tours. We also host events jointly with other technical societies to reach out to wider participants.

Chapter 7 Officers:

Chair: **Looja Tuladhar, P.E., PhD**

Looja has broad experience in protective relaying and power system analysis, including short circuit studies, coordination studies, relay settings, transient analysis, and planning studies. He holds a Doctor of Engineering degree in Power Systems from Cleveland State University, Cleveland, Ohio. His hobbies include outdoor activities like running, hiking, and being involved in social work.

Vice Chair: **Chaitali Naik, P.E.**

Chaitali Naik got her master's degree in EE (Power Systems) from Michigan Tech University. She is an Electrical Engineer III, working at Commonwealth Associates for the last four years. Chaitali is passionate about her community and profession and is involved in PES on local and global level, Women Empowerment programs, STEM encouragement activities through IEEE. In her free time, she likes reading, travelling, and other outdoor recreational activities like hiking.

Secretary: **Binaya Joshi, P.E.**

Binaya Joshi is an Electrical Engineer currently employed at Commonwealth Associates based in Jackson, Michigan. His professional background includes experience in power systems with a focus on power system protection. He holds a master's degree from Michigan Tech University.

Treasurer: **Chris Nelson, P.E.**

Chris Nelson is an electrical engineer employed at Commonwealth Associates. His professional experience includes system studies, battery energy storage, relay settings, and working as an owner's engineer. He holds a bachelor's degree from Central Michigan University. His hobbies include skiing, sailing, cars, and FPV drones.

Chapter 7 Profile (contd)

Our events:
Some of the events we held solely as well as jointly with other chapters in 2020-2021 were:

1. September 3, 2020 - Distinguish Lecture Webinar on "BIG DATA, IoT, DATA MANAGEMENT FOR POWER INDUSTRY" by John D. McDonald, P.E. (IEEE Life Fellow, CIGRE Distinguished Member)
2. October 30, 2020 - Limits of Renewable & Baseload Energy Sources (part 1) by Chuck Hawkins (Retired Professor Emeritus, UNM and University of Florida)
3. November 6, 2020 - Limits of Renewable & Baseload Energy Sources (part 2) by Chuck Hawkins (Retired Professor Emeritus, UNM and University of Florida)
4. February 12, 2021 - Technical presentation "Challenges of Battery Electric Storage Systems (BESS)" by Ian Hutt, PE, PMP (Commonwealth Associates. Inc.)
5. February 19, 2021 - "Homi J Bhabha: His Life and Legacy" by Sharan Kalwani (Senior Member IEEE, Training Specialist)
6. March 18, 2021 - "Three-phase power transfer, the automotive nightmare too expensive and too noisy" by Joanna McLellan (EMC Productivity)
7. March 05, 2021 - "Small Modular Reactors (SMR)" by Steven Mirsky (NuScalePower)
8. April 16, 2021 – "Propane: A low carbon solution for the future" by Gokul Vishwanathan (PERC – Propane Energy Research Council)
9. April 27, 2021 - "The Impact of Inverter-Based Resources (IBR) on Protection System" by Steve Miller, P.E., Looja Tuladhar, P.E., Ph.D., and Koustubh Banerjee, P.E. (Commonwealth Associates, Inc.)

Upcoming events:
We will be hosting our regular monthly meeting (First Monday of each month). We will be hosting an IEEE day event in the month of October. Please keep an eye on your inbox for further detail.

Invitation:
We do not have any open positions but are always searching for other volunteers looking to lead or support activities as we expand and increase our presence within southeastern Michigan. If you or anyone you know is interested in filling any position next year or volunteering in any other way, please reach out to Binaya Joshi at binaya.joshi@cai-engr.com or Looja Tuladhar at l.tuladhar@alumni.csuohio.edu.

Ford-Edison Hydro Plant Tour

IEEE SE Michigan
Presents
Historical Tour of the Henry Ford-Thomas Edison Hydroplant

At Glance

- **When:**
  Date: September 24th, 2021
  Time: 11:00 AM– 3:00 PM (EST/EDT)

The Southeastern Section of IEEE will host another tour of the Fairlane Estate -- Home of Clara and Henry Ford -- where Henry and Thomas Edison built a hydropower plant on the Rouge River across the street from the University of Michigan Dearborn. This is an historical landmark that presents insight into the evolution of engineering theory and practice in several disciplines (civil, mechanical and electrical). We will be guided by Dave Wheeler, the electrical engineer who led the recommissioning of the generation system as a historical landmark in the early 1990's.

- **Where:**
  Assembly at University of Michigan-Dearborn

- **Audience: OPEN to ALL***

*Sponsored by
IEEE
SE Michigan
Education
Committee*

This tour was last conducted in 2019. Back then, the event was approximately 4 hours -- including transportation from and to pick-up and drop-off points (TBD). Lunch will be provided at 12 noon, the actual tour will take 2 hours, then return to campus starting at 2 PM; arriving at the original pick up points no later than 3 PM.

*Pre-Registration Required!
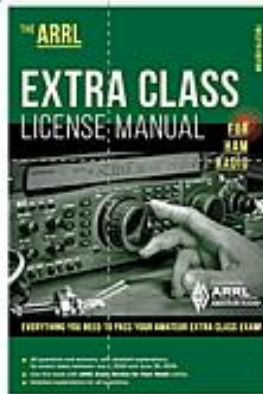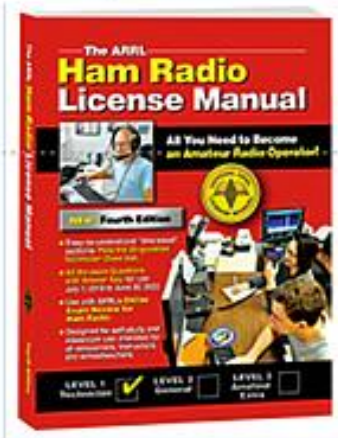
https://events.vtools.ieee.org/m/280152

Ham Radio Classes

Hazel Park Amateur Radio Club
New ZOOM Classes Begin September, 2021

Technician Class License
Thursdays, 7-9PM,
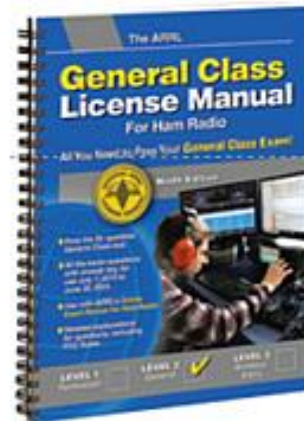Sept. 23-Nov. 18

General Class License
Mondays, 7-9PM
Sept. 13-Dec.6

Extra Class License
Tuesdays, 6-9PM
Sept.14-Dec. 7

Contact N8REL@ARRL.net

Chapter 11 Profile

Introducing the IEEE Engineering in Medicine and Biology Society (EMBS) Chapter (aka Chapter 11)

Patrick Rye is the Chair for the Southeastern Michigan Section's EMBS, a position he has held since 2020. He graduated from Kettering University in 2017, with a Bachelor of Science in Mechanical Engineering, a specialty in Bioengineering Applications and a minor in Electrical Engineering. He graduated from University of Michigan with a Master of Science in Mechanical Engineering in 2020. He currently works at General Motors as an Occupant Safety CAE Integration Engineer.

Dr. Snyder is currently Vice-Chair, Chapter 11, IEEE SE Michigan section. He has a PhD in bio engineering from University of Wisconsin, Madison. His research was in cardiovascular dynamics blood flows, pressures and volumes. He developed a mathematical model that executes in real time with real time displays. The model included the closed-loop entire human circulatory system with particular attention on the low-pressure venous system including venous collapse. He is currently retired, but is working on an updated real-time cardiovascular system model that will execute in real-time with real-time displays with more detail than the original research model.

Dr. Yan Yan is currently Secretary of Chapter 11, IEEE SE Michigan Section. He is a research scientist from the Functional and Molecular Ultrasound Research Laboratory, led by Dr. Mohammad Mehrmohammadi at Wayne State University. He holds a bachelor's degree in Computer Science and Telecommunication from the Post and Telecommunication of Chongqing University, a master's degree in Computer Science, and a doctorate in Biomedical Engineering from Wayne State University. His research focused on developing the new generation, multi-parametric acoustic imaging device for fetal and maternal care. His areas of interest are Medical Device Development, Medical Image, Machine Learning, and Data Mining.

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 "Trident"(AP03) Antennas and Propagation Society,   (CH04050)   (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)

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

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 has changed to its new home, kindly make a note of it! The new home is located at http://r4.ieee.org/sem/ .** The old links will continue to work for some time, but will be changing permanently in the near future.

SEM Wavelengths:
https://r4.ieee.org/sem/about-sem/sem-history/wavelengths-magazine-archive/
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 Web Calendar:
http://r4.ieee.org/sem/
Select "SEM Calendar" button in the top row of the website.

SEM Web Meetings:
http://r4.ieee.org/sem/
Select "SEM Meeting List" button in the left-hand column.

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

Michigan Institute for Plasma Science and Engineering: Seminars for the 2018-2021 academic year:
http://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://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 arrangement of communications links designed to provide inter-unit coordination and collaboration.

The SEM Executive Committee meets in a teleconference each month on either the first Wednesday or first Thursday at noon. 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 **Bhupinder Mavi**, the section secretary at: **bmavi@outlook.com,** 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.
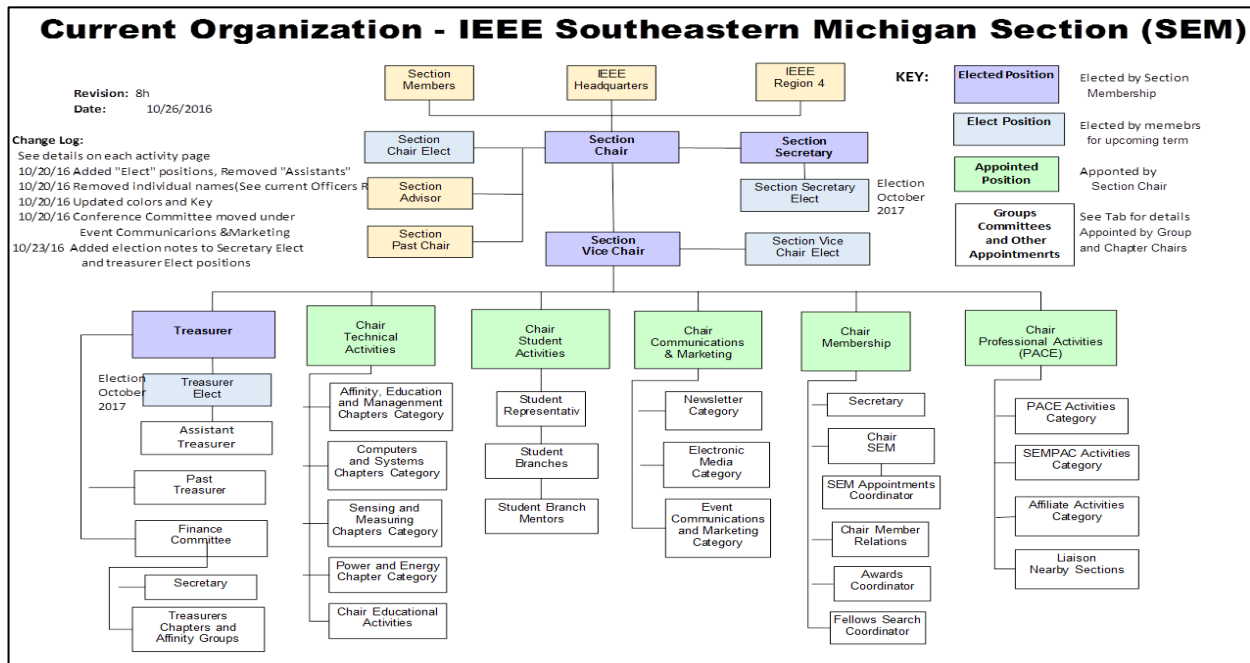
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to 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.

Bhupinder Mavi - SEM Secretary 2021

Download the complete SEM Organization Chart, in PDF format, from our Website at: http://r4.ieee.org/sem/
Click on "About SEM" Tab and "Current Officers" *(NOTE: this is now password protected)*

Current Organization - IEEE Southeastern Michigan Section (SEM)

ExCom Meeting Schedule

NOTE: All SEM members are invited to attend ALL ExCom (executive committee) meetings:

Below is the 2021 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. Information on each Face-to-Face (in-person) Meeting will be sent out once the venue is confirmed.

Please mark your calendars for the 2021 meetings. Or, link your personal calendar to the SEM Web calendar.

Section Administrative Committee (ExCom) Meeting Schedule for 2021:

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**.

2021 Meeting Schedule:

ExCom Meeting	*Date & Time*
SEM Section ExCom Monthly Meeting (Teleconference) for September 2021	**9/1/2021 18:30**
SEM Section ExCom Monthly Meeting (Face-Face) for October 2021	10/7/2021 18:30
SEM Section ExCom Monthly Meeting (Teleconference) for November 2021	11/4/2021 18:30
SEM Section ExCom Monthly Meeting (Teleconference) for December 2021	12/1/2021 18:30

Bhupinder Mavi
SEM Secretary 2021
bmavi@outlook.com

Letters to the Editor

As promised, we have now started a "Letters to the Editor" column. Letters, bouquets, brickbats, suggestions, advice, feedback, opinions may be sent to:

letters@ieee-sem.org

To the Editors of Wavelengths:

Please note that elections for our Section leadership is rapidly approaching with nominations for officers in our Section Executive Committee, as well as in our 'Geo-units' (Chapters and Affinity Groups). Student Branches and HKN Chapters arrange their own elections based on what their leadership considers best.

The first step in the election process is to gather nominations for each office. Everyone in the Section will receive a link to a survey system that will gather the names submitted for each office in all the positions.

Why a survey?
With 4 Affinity Groups, 17 Technical Chapters and the Executive Committee for the Section and the Chair, Secretary, Vice-Chair and Treasurer positions to fill that amounts to (4 + 17) X 4 + 2 = 74 offices! (Note: the '+2' accounts for the Excom (Executive Committee) where we elect half the new officers each year and give them a year of 'training' before they fully 'take office' for 2 years).

With that many offices to fill, and potentially about 2,500 Section members who may either self-nominate, or nominate someone they know, it was decided to use the survey system to help sort through all those nominations.

Some have objected to the survey system in the past. Before we begin using it in 2021, the Nomination & Appointment Committee would like to hear from anyone with a proposal for a 'better' system.

Officers for the Nomination & Appointment Committee may be found on the SEM Webpage at: https://r4.ieee.org/sem/ under the TAB: <u>About SEM</u> as the "Organization Roster". Or directly download the complete PDF from:

([**https://r4.ieee.org/sem/wp-content/uploads/sites/6/2021/07/Organization_Roster_7.2.2021.pdf**](https://r4.ieee.org/sem/wp-content/uploads/sites/6/2021/07/Organization_Roster_7.2.2021.pdf))

Do a quick search for 'Nomination' and our list of officers will show up along with their email addresses. (Change the -AT- to @ and you are good to go.)

Regards,

kw Kimball Williams   DE N8FNC
NCE / ARRL #0001247589, FISTS #17391, LICW #160, MIQRP #M-1951,
NAQCC # 10610, QRP-ARCI #16639, SKCC #22177,
k.williams AT ieee.org   IEEE SEM Section Information Management Coordinator and Curmudgeon at Large
Ph: 313-355-4396 (Note: This phone is only enabled for US and Canadian calls.)
"A friend is not a fellow who is taken in by sham
A friend is one who knows our faults and doesn't give a damn"
--Unknown.

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
cgjohnson@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 <u>do not be shy</u>. 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.

 <u>Quote</u>*:*
"If a tree falls in a forest and no one heard 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
Editor, Wavelengths,
2018~2019~2020~2021

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 "f" button under the top row)

SEM LinkedIn Page
(Select the "in" button under the top row)

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

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 page under the "About SEM" button and select "Current Officers."

Section Officers

Section Chair
David Mindham

Section Vice-Chair
Sharan Kalwani

Section Secretary
Bhupinder Mavi

Section Treasurer
Colleen Chmielewski

Standing Committees:

Section Adviser
Don Bramlett

Wavelengths Editor
Sharan Kalwani

Chair Educational Activities
Christopher Guirlanda

Chair Finance
Sharan Kalwani

Chair Membership Development
Sharan Kalwani

Chair Nominations & Appointments
Kimball Williams

Chair Professional Activities (PACE)
Sharan Kalwani

Chair Student Activities
Mel Chi

Student Communications Coordinator
Michael Anthony

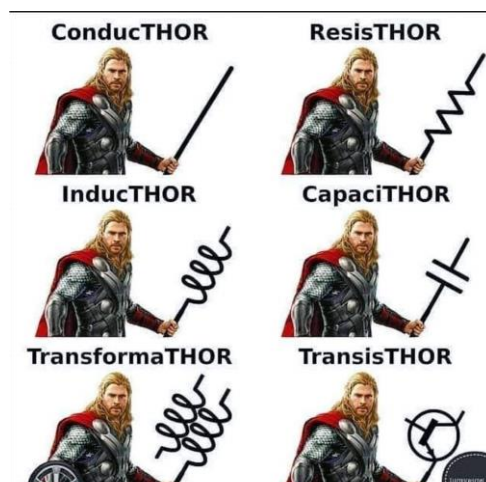**Student Representative**

Chair Technical Activities
Jeffery Mosley

IEEE Southeastern Michigan

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

ConducTHOR   ResisTHOR
InducTHOR   CapaciTHOR
TransformaTHOR   TransisTHOR

Leadership Meetings

SEM Executive Committee Monthly Teleconferences:
- 1st Wednesday or Thursday of Each Month @ Noon
- 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 Face-to-Face Meetings:
- Once every 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
  http://r4.ieee.org/sem/
  (Select the "SEM Calendar" button in the top row.)

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