

# Wavelengths



## Volume 60 – Issue 09

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### 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
<a href="#">SEM Section ExCom Monthly Meeting (Teleconference) for September 2020</a>	9/2/2020	12:00 noon
<a href="#">BIG DATA, IOT, DATA MANAGEMENT FOR POWER INDUSTRY</a>	9/3/2020	16:00
<a href="#">5G and Modem EMI Test Receivers</a>	9/17/2020	17:30
<a href="#">Introduction to Embedded Systems (part 1)</a>	10/3/2020	09:30
<a href="#">IEEE Day 2020</a>	10/6/2020	11:45
<a href="#">SEM Section ExCom Monthly Meeting (Face-Face) for October 2020</a>	10/7/2020	17:00
<a href="#">Introduction to Embedded Systems (part 2)</a>	10/10/2020	09:00
<a href="#">Does Science Fiction Influence Technical &amp; Social change?</a>	10/10/2020	11:30
<a href="#">Embedded Systems Workshop 2020 - Day 1 &amp; Day 2 (online)</a>	10/17/2020	08:00
<a href="#">Embedded Systems Workshop 2020@ONLINE - Day 2</a>	10/24/2020	08:00

**Chair's Message**

Welcome to the September issue of the Wavelengths.

I'm excited for several upcoming events in Southeastern Michigan. Does Science Fiction Influence Technical & Social Change? Is being held in October. The event has been in the making for over a year. It was originally slated to be an in-person event but is changing to virtual due to Covid. The event features an entire day of presentations, discussions, and networking. It is a unique event and I'm impressed with SEM members for organizing it.

The Embedded Systems workshop is also slated for October. The workshop has proven to be one of SEM's premier events and this year's event is no exception. Thank you to all the volunteers who keep this event running year to year. There are also several great Chapter events in September. Please check out all the events in this newsletter.

2020 continues to bring unique challenges for all of us. It's great seeing how our members have adjusted to the new normal and provided excellent virtual events. We've also made the decision to change our October face-to-face executive meeting to a Zoom Conference. The executive meeting is a great opportunity for new volunteers to get involved with section activities. We will be looking for ways to improve collaboration on the Zoom platform to make up for the lack of face to face connection.

Please stay safe and let us know what we can do to be of help.

Thank you for reading this month and stay safe.

David Mindham  
[dmindham -At- ieee.org](mailto:dmindham-At-ieee.org)

## 2020 Elections

### 2020 SEM Officer Elections!

#### Elections in 2020:

Our Section Secretary 'Elect' and Section Treasurer 'Elect' will have completed their year of 'training' and will begin serving their full two-year terms in 2021.

Each year we select our Section, Senior Executive Committee officers, alternating between Chair & V-Chair and Secretary and Treasurer, every other year. This provides an overlap with experience with 'in training' officers to ensure greater continuity of operations and the fulfillment of long term programs and projects. (Of course, we also look for the immediate 'past' officer to remain active and help coach the entire team.)

#### Staggered Election Terms:

Because of the 'staggered terms' that were enacted with the 2015 elections, this year we will elect our Chair and Vice-Chair for their training terms.

Next year we will elect our Section Secretary-elect and Treasurer-elect for their training terms.

#### Affinity Groups and Technical Chapters:

Officer elections are held each year for all of the Section's 4 Affinity Groups and 17 Technical Chapters (geo-units).

- ☐ Chair,
- ☐ Vice-Chair,
- ☐ Secretary,
- ☐ Treasurer,

See the complete list of current officers in the download PDF file

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

Select the 'Organization Roster to download the file.

#### Office Requirements:

Note that holding office in any Affinity Group (AG), or Technical Chapter (Ch), requires membership in the AG or Ch., in addition to membership level above Student level. Please ensure that you (if you self-nominate) or your acquaintance (if you nominate another person) holds the required membership in the organization.

You will also need the Candidate's IEEE **Member number** in order to complete the survey form. This helps avoid 'surprise' nominations where the person elected does not know they are on the ballot for an office election.

If you need help finding your Chapter affiliation, check the "**ORG UNITS cheat sheet**" by Sharan Kalwani on page 25 to see which technical Societies are aligned with each of the SEM Chapter Numbers.

Student members are encouraged to seek offices in their local university Student Branches, and gain experience in those organizations.

Students may not hold office in any Section geo-unit. (We want them to concentrate on getting that all-important degree before becoming too involved with Section level activities.)

#### Ballots for Election to Office:

Any member of the Section, above the level of Student Member may submit a nomination for someone they know or for themselves by filling out the form at:

<https://getfoureyes.com/s/a60uH/>

The ballot process opened on September 1 2020 and will close on September 21, 2020.

Please use the link above to submit a nomination now.

## Candidate & Officer Training

A series of Officer Training events which to cover the elements needed by our SEM election Candidates (and our current Officers) will be broadcast early in September. These are a series of training sessions, potentially for new officers.  
(*Though some 'old' officers could use them as well.*)

- ☐ Zoom virtual workshops at **Noon** on the following days:

- ☐ **September 1 - Chair Functions**
- ☐ **September 3 - Secretary Functions**
- ☐ **September 7 - Vice-Chair Functions**
- ☐ **September 9 - Treasurer Functions**

Use the link below to connect to the Zoom meeting

<https://us02web.zoom.us/j/84235344708?pwd=T0lkVDc5NWk1bzRodTIjQ002ZFMOU09>

#### Voice over Power Point Training:

Many on-line virtual training modules are available through the SEM Website Training page at:

<http://sites.ieee.org/sem/about-sem/training/>

## 2020 Election – Continued:

**Non-Elected Geo-Unit Positions:**

While we elect our basic officers (Chair, Vice-Chair, Secretary, Treasurer), many geo-units utilize the talents and energy of ‘appointed’ volunteers. For appointed positions, contact the Chair of the particular geo-unit, and discuss the opportunities.

**Election Schedule:**

As noted in our announcement of the election process early in the year, we are now notifying all “voting members” of the opportunity to run for election to any elected governing position within the Section, Affinity Groups or Technical Chapters.

The election schedule we are following for 2019 is as follows:

- **March:** Announce upcoming Elections.
- **August:** Advise members of the election schedule and options for ballot nominations.
- **September:** Open the survey site for candidates for nomination (self-nominated or nominated by another member.)
- **October:** Open the vTools election system for two weeks
- **November:** Compile election results, resolve alternatives, fill vacancies.
- **December:** Deliver results report to the Section Executive

All members above Student Member grade are eligible to vote and hold Chapter, Affinity Group and Section office. (Yes, Graduate Student Members do qualify for election to officer positions.) Please consider what positions you might wish to both serve the IEEE as well as learn new leadership and organization governance skills.

Be prepared to submit a self-nomination for an officer position when we open the balloting process. If you are new to this process, it makes good sense to begin your involvement in any of the governance areas by initially gathering experience in ‘volunteer’ roles. You are encouraged to have involvement at the committee volunteer level as stepping stones to prepare for elected offices.

Note: All standing committee positions are ‘appointed’ and not ‘elected’. Contact the current Committee Chair to discuss volunteer options. Also see the SEM Organization Roster posted in the SEM Website for details of each committee.

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

Look for the button “Organization Roster” and download the PDF file.

***K.williams@ieee.org***  
***Chair: N&A Committee.***

**Ballots for Election to Office:**

Submit a nomination for someone you know, or for yourself by filling out the form at:

<https://getfoureyes.com/s/a60uH/>

The ballot process opened on September 1<sup>st</sup> and will close on September 21<sup>st</sup>, 2020. Please use the link above to submit a nomination now.

**Section Mission**

Inspire – Enable – Empower and Engage Members of IEEE at the local level.  
 For the purpose of:

- Fulfilling the mission of IEEE to foster technological innovation and excellence for the benefit of humanity,
- Enhancing the members’ growth and development throughout their life cycle, and
- Providing a professional home.

**Section Goals**

- Increase member engagement,
- Improve relationships with and among members,
- Increase operational efficiency and effectiveness, within the section and its interfaces,
- Enhance collaboration – serve as the local face of IEEE to the community,
- Increase membership, and
- Ensure the collection of appropriate information necessary to assist the IEEE to become a data driven organization.

SEM ExCom Minutes

**IEEE Southeastern Michigan ExCom Meeting Minutes 8/6/2020**

**Attendees:**

Mirella Soe Casallo Torres, Colleen Chmielewski, Akio Fujimaki, Christopher Johnson, Abbas Kadhemi, Sharan Kalwani, David Mindham, Harpreet Singh, Aaron Ustes and Kimball Williams

**Call to order at 12:02 PM**

**Quorum not established**

**Agenda Approval – Approved**

**July Minutes – Approved**

official minutes posted to SEM website by Scott

**Treasurer's Report – [David M. will reach out to Colleen [Treasured Elect] for transition plan.**

**Finance Committee's Report – absent.**

**Chair's Report – David M. Sections Congress is cancelled.**

**Old Business –**

IEEE 2020 Day - Virtual event is being planned by Sharan Kalwani for Region 4.

**New Business**

- a. David M. looking for viable groups to pilot project agile groups for the region. High level. Looking for suggestions. Could be published in Wavelengths to draw possible groups.
- b. Chapter Chair Meetings. David is setting up Doodle polls for a common meeting place and propose how to hold virtual events. David asking each individual chapter chair to meet. Also include student chapters and HKN chapters.
- c. Update Officers email list. David and Kimball working on purging inactive/incorrect

**New Business –**

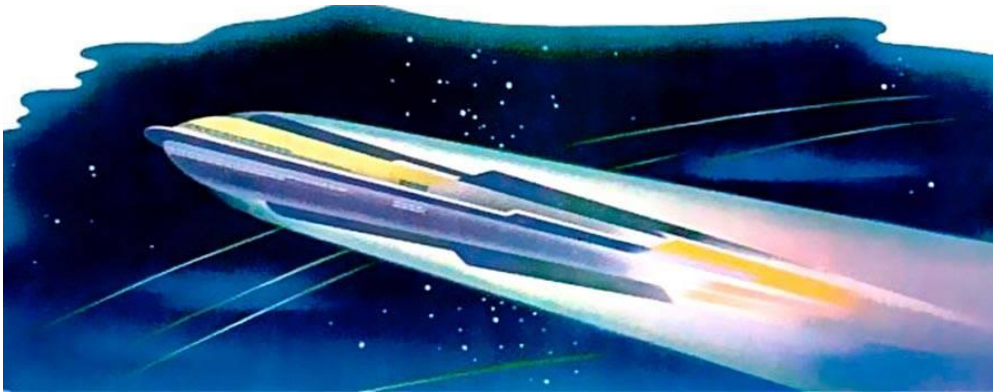
Publish ExComm meeting minutes - no motion required. Will put into practice.



## SYFY Conference

**DOES SCIENCE FICTION INFLUENCE TECHNICAL & SOCIAL CHANGE?**

(Free virtual conference)

**October 10, 2020 Saturday Noon – 17:30 EDT - USA**

The question we wish to pose is: "When looking at those times when science fiction has seemed to predict a change in technology or social behavior, are we witnessing a real effect, or only a coincidental alignment of circumstances?" Can 'Art,' in general, influence technology and society?

**"Anything one man can imagine; other men can make real."**

— *Jules Verne, Around the World in Eighty Days.*

Science Fiction fans point to examples of the similarity between Star Trek's 'communicators' that seemed revolutionary when the programs first aired and the ever present 'Cell Phones' of our present day as evidence of the influence of science fiction on our civilization's technical directions. They point to how Dr. Martin Luther King, Jr dissuaded Nichelle Nichols (Lieutenant Uhura) from leaving the Star Trek cast because of the positive influence her presence was having on the culture of American audiences. (See her comments on: [https://www.youtube.com/watch?v=pSq\\_Uluxba8](https://www.youtube.com/watch?v=pSq_Uluxba8)).

Did the Sinclair Lewis novel "It Can't Happen Here" prevent the rise of a demagogue in the USA in the 1930's? Are we seeing George Orwell's 1984 vision of "Big Brother is watching" in the NSA surveillance of our phone calls and email messages and in the rise of universal facial recognition software in China?

We have asked our keynote speaker and our panelists to consider these questions and analyze them from several points of view:

- Is the linkage real, or just a fanciful illusion?
- If the effect is real, are the authors aware of any influence they may have?
- Given the views of many possible futures, can Science Fiction help us change our future for the better?

And, what about 'Magic'? Arthur C. Clarke, the brilliant futurist and writer said: "Any sufficiently advanced technology is indistinguishable from magic." What can we do with those phenomena that have been observed but not yet scientifically understood? Do we dismiss them, seek to bring them into the scientific discourse, or embrace the mysticism?

Come join us: engage with our speakers and join in the panel discussions and networking sessions embedded in the schedule. We look forward to greeting you all and engaging in both serious discussions and flights of fancy.

**[Register Here:](#)**

**WebEx connection information will be emailed to registered participants 3 days before the beginning of the conference.**

**Keynote Speaker: Dr. Lisa Nocks**

**Lisa Nocks, Ph.D.** is a historian of science and technology at the IEEE History Center. Her research focus is the history of robotics and AI.

She is the author of ***The Robot: The Life Story of a Technology*** (Johns Hopkins University Press, 2008), which was named a top academic title by the American Library Association's *Choice* magazine. She is particularly interested in the reciprocal influences between technology and popular culture. Among her published articles are "That Does Not Compute: The Brittleness Bottleneck and the Problem of Semantics in Science Fiction" in *Science Fiction and Computing: Interlinked Domains* (McFarland); and "Robots" in *The Oxford Encyclopedia of the History of American Science, Medicine, and Technology*, ed. by Hugh Slotten (OUP).

Dr. Nocks has lectured on a variety of topics at conferences around the world, and taught the histories of science, technology, and communication on the university level for many years before joining the IEEE History Center in 2017. Currently, she curates exhibits on the history of technology, writes articles and gives

lectures on the history of electrical technologies for IEEE, and has served as an Industry Professor in the College of Arts & Letters at Stevens Institute, in addition to working with IEEE members to record and preserve their contributions to the history of technology. She helped to spearhead the History Center's new Global Museum program, and has also served on the IEEE Tech Ethics Committee to support the IEEE mission of technology in service to humanity.

**Keynote Lecture Abstract****"Soldiers, Servants, and Whores, Inc. – The Science Fiction Android as Gedanken experiment"**

By the early 21<sup>st</sup> century, the initiative to develop humanoid robots that had begun in Japan in the 1960s had spread to research labs around the world. Researchers repeated to the press the mantra that after all, why bother to convert human spaces like homes and care institutions to accommodate robots, when it might be possible to develop intelligent robots that could operate in a human environment?

The social challenges of integrating humanoid robots or *androids* into human society had been described in science fiction for many decades, and a number of robotics researchers have acknowledged the influence of science fiction on their career paths. These stories not only described the technical innovations that would make this possible, but operated as a kind of thought experiment, considering the potential social, economic, and ethical challenges inherent in developing machines that could compete both intellectually and physically for the same environmental niche as humans. This keynote focuses on how such issues played out in android stories written between the 1920s and the late twentieth century, when the first real humanoid prototypes were exhibited to the public.

**[Register Here:](#)**

**ZOOM connection information will be emailed to registered participants 3 days before the beginning of the conference.**

SYFY Conference

SYFY Conference

**Agenda / Schedule:**11:30 Sign-in - Networking**Noon Keynote - Dr. Lisa Nocks: "The Science Fiction Android as Gedanken experiment"**

13:00 1st Panel / "Will SF help lead us to an integrated C + FE future?"

14:00 2nd Panel / "In what ways may SF and STEM reduce inequality and promote human wellbeing?"

15:00 3rd Panel / "Does Science Fiction Influence Technical and Social Change?"

16:00 Roundtable Open Discussion.

**17:00** Wrap up & conclusion of conference.

(We look forward to seeing you all here next year to expand the discussion.)

**Panel Moderator**

**Karen Burnham** is vocationally an engineer and 'avocationally' a science fiction reviewer. She writes for venues such as *Locus Magazine*, *Strange Horizons*, and *Cascadia Subduction Zone*. She was nominated for the British Science Fiction Award for Non-Fiction in 2012 and 2014. She works as an electromagnetic scientist, engineer, and modeler in Colorado where she lives with her husband and two sons.

Karen has participated in various science fiction conventions and conferences in different capacities. She served as the Vice President of the [International Association for the Fantastic in the Arts](#), which holds an academic and writers conference each Spring in Florida. She was the head of the Academic track of Programming at the 72nd World Science Fiction Convention in San Antonio, TX in 2013. She has also produced and hosted three podcasts: the Locus Roundtable, [SF Crossing the Gulf](#) with Karen Lord for SFSignal.com, and Small Blue Planet with Cheryl Morgan, all appearing at [Locus Magazine's](#) website. In January 2017 she was the Science Guest of Honor at [ConFusion](#) in Michigan.

Email: [karen.burnham@gmail.com](mailto:karen.burnham@gmail.com)

Sponsored by: IEEE Southeastern Michigan EMC Chapter (8) / IEEE Southeastern Michigan Section / Engineering Society of Detroit

**Register Here:**

ZOOM connection information will be emailed to registered participants 3 days before the beginning of the conference.



**Panel Members:**

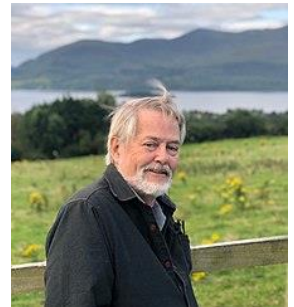
**A.T. Greenblatt** is a mechanical engineer by day and a writer by night. She lives in Philadelphia where she's known to frequently subject her friends to various cooking and home brewing experiments. She is a graduate of Viable Paradise XVI and Clarion West 2017. Her work has won a Nebula Award, has been in multiple Year's Best anthologies, and has appeared in *Uncanny*, *Beneath Ceaseless Skies*, and *Fireside*, as well as other fine publications. You can find her online at <http://atgreenblatt.com> and on Twitter at [@AtGreenblatt](https://twitter.com/AtGreenblatt).



**Tobias Buckell** was born in 1979 in Grenada in the Caribbean and raised on a boat. He attended Clarion in 1999. Not long after that he made his first sale, "Fish Merchant", to Scott Edelman at Science Fiction Age. The story appeared in the March, 2000 issue. About the time of the sale, his story "In Orbite Medievali" won a quarterly contest for the Writers of the Future. Since then his stories have appeared in a variety of places, including the magazines Analog and Nature, and the anthologies New Voices in Science Fiction, Men Writing Science Fiction As Women, and So Long Been Dreaming.



**Dr. Gary K. Wolfe** is a US academic and author. Associated with Roosevelt University in Chicago until his recent retirement, he has also published a monthly review column for Locus magazine since 1992. Two of his notable books are "The Known and the Unknown: The Iconography of Science Fiction" (1979) and "Evaporating Genres: Essays on Fantastic Literature" (2010). He has edited collections of science fiction literature for the Library of America and serves as the series editor for the University of Illinois Press' "Modern Masters of Science Fiction" line. He received the Pilgrim Award in 1987 and the IAFA Award for distinguished scholarship in 1998.

**[Register Here:](#)**

ZOOM connection information will be emailed to registered participants 3 days before the beginning of the conference.

## SYFY Conference

**Michael J. DeLuca**'s roots are mycorrhizal with sugar maple and Eastern white pine. He's the publisher of *Reckoning*, an annual journal of creative writing on environmental justice. His fiction has appeared most recently in *Beneath Ceaseless Skies*, *Three-Lobed Burning Eye*, *Strangelet* and *Middle Planet*. On twitter/web you can find him at . @michaeldeluca; mossyskull.com.



**Geoffrey Alan Landis** (born May 28, 1955) is an American aerospace engineer and author, working for the National Aeronautics and Space Administration (NASA) on planetary exploration, interstellar propulsion, solar power and photovoltaics. He holds nine patents, primarily in the field of improvements to solar cells and photovoltaic devices and has given presentations and commentary on the possibilities for interstellar travel and construction of bases on the Moon, Mars, and Venus. Supported by his scientific background Landis also writes hard science fiction. For these writings he has won a Nebula Award, two Hugo Awards, and a Locus Award, as well as two Rhysling Awards for his poetry. He contributes science articles to various academic publications.



Dr. Mary Turzillo: After a career as a professor of English at Kent State University Dr Turzillo is now a full-time writer. In 2000, her story "Mars Is No Place for Children" won SFWA's Nebula award for best novelette. Her novel "An Old-Fashioned Martian Girl" was serialized in Analog in July-Nov 2004. These two works have been selected as recreational reading on the International Space Station.

**[Register Here:](#)**

**ZOOM connection information will be emailed to registered participants 3 days before the beginning of the conference.**

ESD Gold Awards



## ESD Gold Awards

# GOLD AWARD

## RECEPTION & RECOGNITION 2020

Join the ESD Affiliated Technical Societies as we come together to honor and recognize our leaders – engineers, scientists and technical professionals who have distinguished themselves through outstanding achievement and service within their respective Societies.

Hosted by The Engineering Society of Detroit and its Affiliate Council, the event will feature this year's Gold Award winner. This award is given to an individual who is collectively upheld by the council for his or her outstanding contributions to the fields of science and engineering.

**PROGRAM**

September 16, 2020

**ONLINE****6 PM**

Welcome and Awards Program

**COST**

**Complimentary to ESD members and the  
Affiliate Society community**

For more information or to register,  
contact Elana Shelef at 248-353-0735, ext. 119,  
or [eshelef@esd.org](mailto:eshelef@esd.org).



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GROUP, INC.**

**Register** online at [www.esd.org](http://www.esd.org) or email [eshelef@esd.org](mailto:eshelef@esd.org).



**U/M-D Student Branch****A Message From the IEEE Student Branch of the University of Michigan-Dearborn**

As the Fall 2020 semester kicks off, we'd like to share an update about our student branch. Where we've been, where we're going, and how we've stayed active even in spite of lockdowns and school closures. Hopefully, along the way we can share a few good ideas or inspirations, especially to our fellow student branches, about how much can still be accomplished in the current situation.

First a little bit of background. Our Student Branch at the University of Michigan-Dearborn has been an active organization for over 35 years. Though our success and accomplishments have ebbed and flowed with the membership and leadership throughout time, we have maintained ourselves as an active and positive influence among students of Electrical Engineering and the related fields, from our founding right up through the present day.

In particular, this past year was our most successful in recent history. Consistent with our commitment firstly to our members and secondly to engaging our fellow students, we substantially increased our membership, hosted numerous technical/professional events, revamped our meetings to make them more engaging and more informative, and many other things. Ultimately, our campus closure in March interrupted our plans for the last 2 months of Winter 2020, but we switched to virtual meetings and kept our members closely in touch through the end of the semester.

This brings us back to the present day. School closures, online classes, lockdowns, and more, are not very conducive to our activities. However, the currently unpleasant situation has actually given us a good opportunity to step back, take a holistic look at our student branch, re-evaluate, re-assess, and move forward more productively. This semester, with online classes and limited ability to connect with the larger student body, is going to be a perfect time to refocus our efforts and make sure that the personal and professional development of our members remains our highest priority. There are three main things we are doing to accomplish this.

First and perhaps most importantly, we are still meeting on a regular basis. This past year, we changed our weekly meetings to include technical presentations by our members. A randomly-assigned member chooses a subject they are interested in, researches it, and puts together a short presentation so that they can share their passions and knowledge with their fellow branch members. These have been a huge boon to our meetings, our members, and our organization as a whole. We will definitely continue doing these presentations. Also, we are looking forward to resuming our in-person meetings. Even though we won't be able to do many events at our school, we can still meet in-person, which is always more productive and more enjoyable for everyone involved.

Second, this semester, which will be a bit slower than usual, is a great chance to work on those nagging things that need to be done but have been pushed onto the back burner for weeks, months, even years. Our student branch is updating all our documentation, creating new promotional material, and majorly revamping our branch website, which had been left unattended for many years and was badly in need of work.

Third, we are taking advantage of the many opportunities that exist within SEM. It's very easy to get caught up in everything that's happening within our own group, and forget two important things: we are part of the greater IEEE; and, there are countless resources within the professional section that are available to students. Whether it's a speaker for a presentation or event, dozens of their own events that are open and often free for students to join in, and much, much more. We know from our own experience that SEM is invested in the success of its student branches; they are willing and eager to share their knowledge and resources with students.

Hopefully, our own experiences can serve as an illustration of what's possible during these times and also give a few useful suggestions and ideas for our fellow student branches. We are proud of all that we have accomplished, and we are looking forward to all the opportunities to succeed and excel this semester.

Wishing everyone the best success during the remainder of 2020 and beyond

**The University of Michigan-Dearborn IEEE Student Branch**

**Aaron Ustes**

[austes@umich.edu](mailto:austes@umich.edu)



## Ham Radio Classes

*The Hazel Park Amateur Radio Club is pleased to offer our Licensing Courses **Online through ZOOM**. They are as follows:*

**Technician:**

**Thursdays, from September 10 to November 19, 7-9PM. Instructors: W9NPI, N8REL, KE8BED**

**General:**

**Mondays, from September 14 to November 30, 7-9PM. Instructors: AC8JF, N8HZM, AA8UU**

**Extra:**

**Tuesdays, from September 8 to December 15 (excluding Nov. 3). Instructors: WB2ADX, K8MU**

*We will assign a ZOOM room and password prior to class time. Pre-registration is necessary.  
To register, Contact [W9NPI@comcast.net](mailto:W9NPI@comcast.net)*

*At this time, HPARC is not conducting exams, but we will advise students of both in-person and Online exams that are available.*

See you in Class!

73,

Jerry Begel, W9NPI  
Education Chairman  
Hazel Park Amateur Radio Club  
248-543-2284

## Election Security

### Local Precincts Have the Power to Secure Our Elections

By Christopher Johnson – SEM Secretary

There is a saying from former US Speaker of the House Tip O'Neill: "All elections are local."

Elections in the United States are a mixed bag - intentionally. There is no one type of ballot or machine to process the ballot. Each of the more than 3,000 US counties is responsible for the election, from local all the way up to federal. The county in Michigan where I served as a poll worker for the last five years (operating the Electronic Poll Book) does a great job. Routinely the longest wait in line for in-person voting is 20 minutes in my county.

The good news is voter fraud is incredibly low, despite claims to the contrary. Additionally, mail-in voting fraud is almost nonexistent, according to the Federal Election Commission (FEC), the independent regulatory agency charged with administering and enforcing federal campaign finance law.

If fraud is low, what are the concerns?

### Mis-information

The worst problem in America is our lack of consensus on what truth is. Social media exacerbates these differences and makes us hate each other and delve deeper into our biases/illusions. ISACA's 2020 Election Security study surveyed more than 3,500 information security professionals from the United States. The study was conducted online from 17 June through 3 July with a margin of error is +/- 2%. ISACA ran the same study in January 2020 and tracked changing perceptions. Mis-information ranked as the top threat (73%). A post gets shared and shared again before it is proven false. If a false post is taken down, it becomes a game of "whack-a-mole" – it keeps popping up. People need to be vigilant in seeking out valid information. Check your sources and check them against each other. Pundits replaced journalists for many individuals. Pundits will give their opinion about the news; journalists will report the news. By the same token, journalists should be transparent about their biases. For example, a Black reporter can accurately give the facts of a confederate flag story, while acknowledging that they had ancestors who were enslaved.

What about fake news? It is easy to pull clips from a news conference or speech and create an entirely different narrative. Look for the original source material to understand the context of what was said by all parties involved. To combat mis-information, "trust but verify" ... check multiple reputable sources before you click "share."

What is the result of misinformation? It plants seeds of doubt about the integrity of the results and acts as a form of voter suppression.

### Hacking or tampering with voting results

The ISACA survey reveals that Tampering with tabulation of voter results (64%); Hacking or tampering with voter registration rolls (62%); Hacking or tampering with voting machines (62%).

According to 538 and other sources, "Before the 2016 election, the online systems of 21 states were "scanned" by Russian cyber actors. Scanning doesn't mean that they were penetrated by hackers — it's more akin to someone driving by a house to see if anyone's at home before robbing it." The threat is real. As a result, state election systems were declared to be critical infrastructure.

## Election Security

This allows state election boards to qualify for security assistance from the federal government, the type of security measures employed to protect our nuclear facilities and electricity grid. Although security is a concern for all involved, it is not a smooth or easy process. States' rights versus federal responsibility. Elections are decentralized on purpose.

What about absentee/mail-in voting? It is one of the safest methods of voting. It follows the same stringent guidelines of Election Day voting. Ballots can only go to registered voters. Returned ballots are checked against the registration rolls. Check with your state/county to find out the rules. Check the timetable for voting by mail. Allow plenty of time for your ballot to be processed.

Currently, because there are no federal guidelines about who can vote by mail or how, each jurisdiction sets up their own rules. Think about your taxes. As long as they are postmarked by the due date, they are not late. Keeping with that theme, they are processed as they are received. Neither of those things are necessarily true about mail-in (or absentee) voting. There is a high degree of security involved with processing the ballots. Many places begin processing the ballots after polls close.

As for me, most years I voted in person. After becoming a parent, I brought my children along to appreciate the process. Once I began working in the precincts, I voted by mail. It was the only way to ensure that I could vote. I may not be working in the precinct where I vote.

Regarding the training of poll workers ... again, it is local. And it is individual. I've received outstanding training from my county clerk. That includes a mandatory in person session for those operating the Electronic Poll Book. Additionally, precinct chairs and vice-chairs are required to complete this training. This ensures that the EPB is always staffed by a trained person - which is key in ensuring all ballots are accounted for (provided is equal to used plus unused plus spoiled). I have heard other clerks were not as skilled in training. Also, there is a shortage of election workers for this election. This is due in part to the fact that most elections workers are older and in the face of a global pandemic, do not wish to participate in a 14 hour (at least in my county) work day.

One change that should be implemented is to set up standards about the processing of mail-in ballots. Some places begin processing the ballots as they arrive; others start counting ballots only after the polls close on Election Day. If mail-in votes double for a state and that state does not begin to process ballots until polls close on election day, more time is required to process and count all of the ballots. This may result in delayed results.

One thing we can all do is demonstrate patience. If the lines are expected to be long, such as for November's presidential election, vote early or by mail if possible. And for this year in particular, exercise patience with the entire process - from the people working the polls all the way through to the results.

Important keys to remember: voter fraud is almost non-existent; fight misinformation by using sites such as [snopes.com](https://snopes.com) and [FactCheck.org](https://factcheck.org); if you plan to vote by mail, verify your status and mail early.



**WIE Meeting report**

Janice K. Means (PE, LEED® AP, FESD, Professor Emeritus, College of Architecture and Design, Lawrence Technological University, from Southfield, Michigan) gave an inspiring presentation in the webinar organized by IEEE SEM WIE on July 23rd, 2020. There were about 14 registered participants who attended the webinar. Her presentation was on 'A story of Gratitude: Life Lessons from a Woman Engineer'.

In the webinar, Janice walked us through her personal stories. She shared her life lessons and the gratitude that she has for all the people that have helped her climb the career ladder. The presentation depicted her love for science and her strength to pursue her dreams. She showed that every hurdle can be taken as a challenge and that one needs to just keep pressing forward to fulfill their dreams. Her way of handling situations and her resilience to grow from hardships is inspiring.

The webinar gave attendees some key takeaways- Don't be afraid to ask questions, have confidence in yourself, do what makes you the happiest and be open to new opportunities.

Janice K Means is indeed a woman one should aspire to be. IEEE SEM WIE is honored to have her as the first speaker for 2020.



**Janice with IEEE SEM WIE plaque**

This webinar has been recorded and if you are interested in listening to Janice, please visit <https://r4.ieee.org/sem-wie/>



*A group photo with speakers and attendees*



*Janice with IEEE SEM WIE officers - Chaitali Naik-chair (top right), Ahfiqia Connie-Vice Chair (bottom left) and Colleen Chmielewski-Secretary (bottom right)*

Regards,

**Chaitali Naik**  
**Electrical Engineer-Electrical Systems Engineering**  
**Commonwealth Associates**

## IEEE Day 2020

IEEE Day 2020 Events Will Be Virtual.  
By Denise Maestri and Sakib Ahmed

*Sakib Ahmed is the IEEE Day communications lead from the IEEE Bangladesh Section in Region 10. Denise Maestri is the IEEE Day staff coordinator. She's the member and volunteer-engagement manager for IEEE Member and Geographic Activities. [Reprinted from IEEE Spectrum]*



For the first time in the 11-year history of [IEEE Day](#), the events—scheduled for 6 October this year—are to be held virtually. Due to the COVID-19 global health crisis, the IEEE Day team has made structural changes.

IEEE Day commemorates the anniversary of the meeting in Philadelphia in 1884 when members of the American Institute of Electrical Engineers, one of IEEE's two predecessor societies, gathered for the first time to share technical ideas.

The event's organizing team is excited to be able to engage members from around the world with the virtual events. Time, location, and travel are no longer obstacles to attending an event. What's more, to accommodate those sections that prefer to hold weekend events, celebrations can be held throughout the first two weeks of October.

### IEEE Day 2020 Organizers suggest activities for the 2020/6<sup>th</sup> October celebration

Not sure the type of virtual event to plan? The team is working on a list of ideas. Here are a few to consider:

- **Webinars:** These could include IEEE-related technical talks, many of which are available [on demand](#). Consider inviting experts from one of the IEEE societies' Distinguished Lecturer programs, or subject-matter experts from industry. Ask members involved with humanitarian activities to talk about their project.
- **Interactive events:** Consider online social gatherings, networking sessions, and virtual gaming.
- **Virtual gatherings:** Use WebEx, IEEE Collabratec, Microsoft Teams, Zoom, or Facebook Live to watch technology videos together. Conduct virtual tours of plants and factories. Read interesting articles or discuss a book.
- **Videos:** IEEE has several videos on [IEEE.tv](#) about its programs. They include a [tour of the IEEE History Center's](#) most treasured artifacts, an overview of some [humanitarian projects](#) members are involved with, and tips on mastering [STEM topics](#).

### PLANNING TOOLS

To assist planners, organizers have created a helpful IEEE [Day-in-a-Box event kit](#). Located under the Resources tab on the [IEEE Day website](#), the kit walks you through the planning process.

In the [Toolkit section](#) of the website are posters, banners, and other promotional materials that can be downloaded. For those who want to distribute T-shirts to their attendees, there are downloadable [templates](#) with this year's design.

It's not too early to start planning. Check the IEEE Day website for updates, and follow us on social media.

***{Our local IEEE Day 2020 coordinator – Sharan Kalwani, can be reached for help in this regard. You can reach him via email. Local planning has already begun with LTU Student Branch have already kicked off their plans}***

## LTU Student Branch

**A Message From the IEEE Student Branch of the Lawrence Technological University**

The Lawrence Technological University (LTU) student branch of IEEE is one of the student branches in the Southeast region of Michigan. After a period of inactivity, the branch was revived by a group of five engineering students in the spring of 2018. In the course of two years, we have grown from a group of five members to one of the larger student organizations at LTU, with 45 student members and six student officers.

During the past two years, our student branch has held a wide range of events including professional development events, volunteering events, fundraising events, and de-stress events. Our professional development events have mainly taken the form of speaker events and panel discussions, as we have invited professors to speak on technical topics as well as students to share their personal experiences in academic projects and research and in industry. Our volunteering opportunities have mainly consisted of tutoring elementary and middle school students in mathematics as well as mentorship programs to engage the youth in STEM. We furthermore like to host some events that appeal to LTU students outside of our electrical and computer engineering department. For example, during National Engineering Week, we hosted a programming competition and ran a paper circuit art activity that allowed students to learn a bit about the basics of electronics while being creative with crafts and art.

During the fall term of 2020, our branch will hold all its activities virtually, in observance of the safety of our community members and in compliance with campus regulations. Shifting all activities to a virtual environment has definitely proven to be a challenge, but our leadership team worked hard during the summer to plan creatively. Our planned fall events include two virtual speaker events on technical topics, a three-session virtual workshop series to introduce underclassmen to electronics, virtual de-stress trivia nights, volunteering partnerships with LTU Formula SAE teams, and more!

Visit <https://sites.google.com/a/ltu.edu/ieee-lawrence-tech/> for announcements of upcoming events and for the Zoom links to our upcoming virtual sessions. To receive more information on our student chapter and events, feel free to contact [ieee@ltu.edu](mailto:ieee@ltu.edu). Our branch is always excited to network and connect with other groups and organizations!

~ **Amar Dabaja**  
**LTU-IEEE Secretary**

**Lawrence  
Technological  
University**



## IEEE Internet Resources

### Internet Resources for Fun and Profit

By **Dan Romanchik**

One of the habits that I got into when I was a technical editor for an electronics trade magazine was making sure that I received information from a wide variety of sources. The internet, of course makes that easy to do. In fact, there's almost too much information.

What I'd like to do with this column is highlight resources that I find interesting and amusing. More than that, though, I'd like to hear from you. Do you have a favorite mailing list? If so, please let me know so that I can highlight it here.

First, let's highlight some of the IEEE offerings. If you get the print version of IEEE Spectrum, you've undoubtedly noticed how thin it's getting. Well, there's more to Spectrum than just the print version. In addition to the print version, you can sign up for eight different email newsletters, including:

- [Career Alert](#). Looking for a job or career advice? Then, this weekly newsletter featuring the latest information on jobs, education, management, and the engineering workplace might be for you. A recent issue, for example, featured information on how companies are tackling the problem of finding people to work in quantum computing and listed several job openings at the National Security Agency.
- [Cars That Think](#). This biweekly newsletter is perfect for automotive engineers. It covers the sensors, software, and systems that are making cars smarter. A recent issue included an article on how engineers are improving autonomous vehicle safety by learning how to read the body language of people on the street.
- [Circuits and Sensors](#). This biweekly newsletter covers development in the semiconductor industry. A recent issue discussed a better way to measure progress in semiconductor technology.
- [Energywise](#). This monthly newsletter is for power engineers. It covers the latest news and opinion for power and energy industry, green technology, and conservation.
- [Product Spotlight](#). Keeping up with what's new on the market can help you do your job better. This weekly newsletter provides the latest in engineering and technology product news.
- [Robotics News](#). This is a biweekly newsletter on advances and news in robotics, automation, and control systems. A recent article describes how researchers at the University of Michigan have designed a structural zinc-air battery that integrates directly into the machine that it powers and serves as a load-bearing part.
- [Tech Alert](#). This newsletter brings you the latest technology and science news and analysis from IEEE Spectrum every Thursday. Today's issue contained a link to an article describing three ways that your PCB design can be "hacked."
- [University Spotlight](#). Thinking about going back to school or advancing your career by pursuing an advanced degree. Then you should subscribe to this monthly newsletter. It has the latest in continuing education programs, degrees and certificates for engineers.

It really is amazing how much information is available just from the IEEE. Tapping into this wealth of information really can help you do your job better and advance your career.

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Do you subscribe to an email newsletter that's interesting and useful or know of a website that other IEEE members should know about? If so, please email me with the details. My email address is [dan@danromanchik.com](mailto:dan@danromanchik.com).



# 18<sup>th</sup> Annual Embedded Systems Workshop

October 17 & 24, 2020, 8:30 a.m. to 12:30 p.m. (Saturdays)  
Virtual/Online Live Sessions, EST/EDT Time Zone

IEEE Computer Society in collaboration with the IEEE Education Society (South East Michigan Chapters) is offering TWO half-day workshops on Embedded Systems on Saturday, October 17<sup>th</sup> & 24<sup>th</sup>, 2020. This workshop is open to all industry professionals, both experienced and newly minted engineers, as well as students. This is the 18<sup>th</sup> year that the event is being held.

The aim is to disseminate knowledge, directly benefitting the IEEE members, at the same time improve the technology skills pool, indirectly boosting the Michigan 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 information display and professional recruitment sessions. Use this opportunity for virtual networking with other engineers, industry experts and embedded enthusiasts.

Please confirm your participation by registering on the IEEE events web site

(Deadline is 15<sup>th</sup> October 5 pm!)

<https://bit.ly/embed2020>

Venue: Virtual using Video Conferencing



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

Attendees: There is a small one-time cost of \$5 to attend, this will help cover video recording, storage, presentations, a dedicated website and other logistics. Several random raffles and virtual door prizes 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 network (virtually) with other professionals as well.

*Brought to you by the IEEE SE Michigan Computer Society & IEEE SE Michigan 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.*

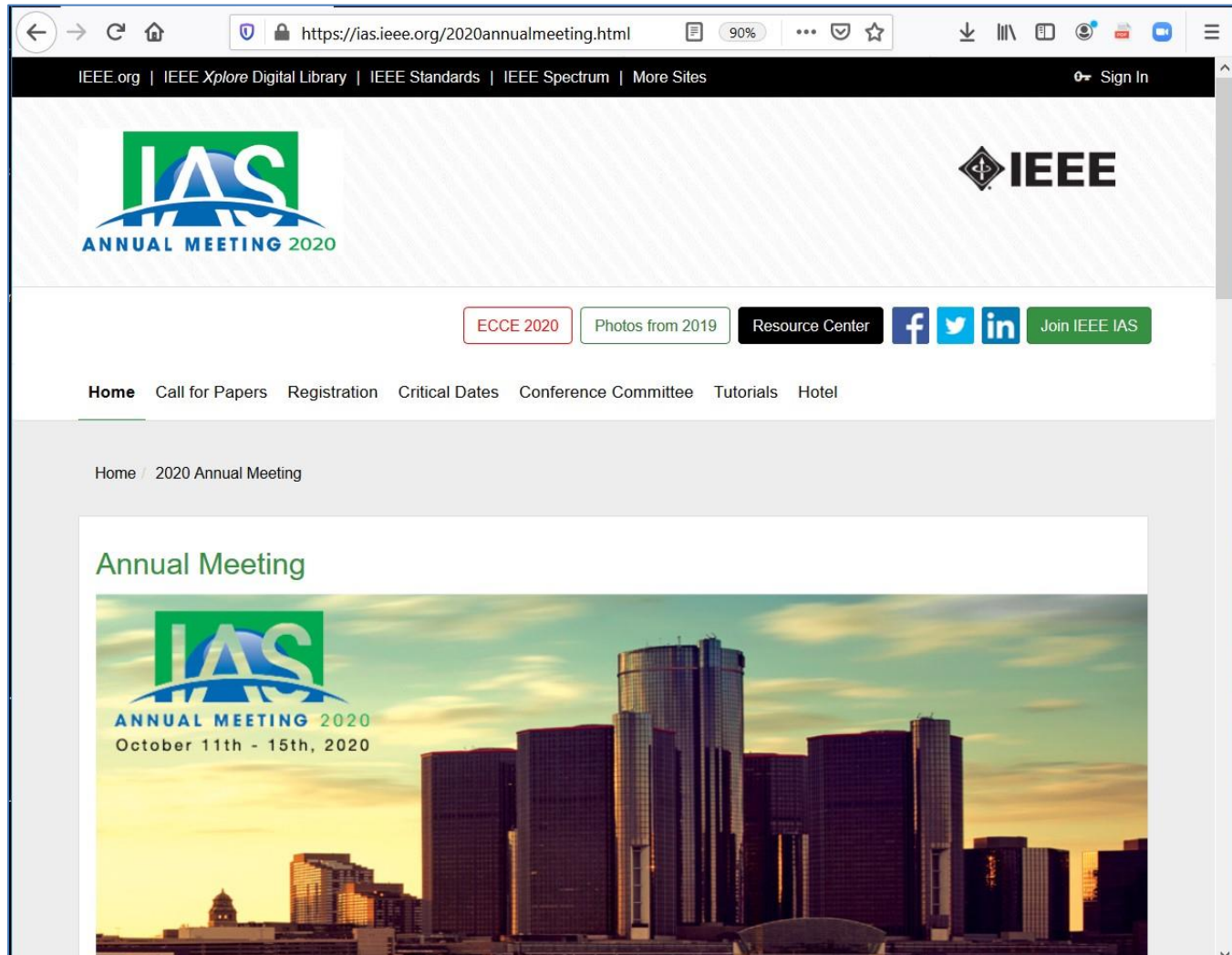
**Open to all, Pre-registration is necessary prior to attending! The deadline to register is 15<sup>th</sup> October 5 PM**

For Technical questions, contact the Program Committee at: [esw2020@ieee-sem.org](mailto:esw2020@ieee-sem.org)

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

**ESW 2020 Program & Organizing Committee:** Subra Ganesan (Chair), Sharan Kalwani (Vice Chair), Ashok Prajapati, Ramesh S, Carla Gerst, Nilesh Dudhaia and Ben Sweet

## ISC 2020





## ECCE 2020

Announcements | Contact



  
IEEE ENERGY CONVERSION CONGRESS & EXPO DETROIT, MICHIGAN OCTOBER 11-15

HOME REGISTRATION ▾ AUTHORS/REVIEWERS ▾ STUDENTS ▾ PROGRAM ▾ HOTEL/TRAVEL ▾ EXHIBITION ▾ ABOUT ▾ Q

# IEEE-ECCE 2020 Detroit, Michigan October 11 – 15

The expo will feature both industry-driven and application-oriented technical sessions, as expositions. The five day conference will bring together practicing engineers, researchers and other professionals for interactive and multidisciplinary discussions on the latest advances in various areas related to energy conversion.



## The Twelfth Annual Energy Conversion Congress and Exposition



**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:

Young Professionals:

Women in Engineering:

Chapter: 01 (SP01) Signal Processing Society,  
(CAS04) Circuits and Systems Society and  
(IT12) Information Theory Society

Chapter: 02 (VT06) Vehicular Technology Society

Chapter: 03 (AES10) Aerospace and Electronic Systems Society and  
(COM19) Communications Society

Chapter: 04 "Trident" (AP03) Antennas and Propagation Society,  
(ED15) Electron Devices Society,  
(MTT17) Microwave Theory and Techniques Society,

Chapter: 05 "Computer" (C16) Computer Society

Chapter: 06 (GRS29) Geosciences and Remote Sensing Society

Chapter: 07 (PE31) Power Engineering Society,  
(IA34) Industrial Applications Society

Chapter: 08 "EMC" (EMC27) Electromagnetic Compatibility Society

Chapter: 09 (IE13) Industrial Electronics Society,  
(PEL35) Power Electronics Society

Chapter: 10 (TEM14) Technology and Engineering Management Society

Chapter: 11 (EMB18) Engineering in Medicine &amp; Biology

Chapter: 12 (CS23) Control Systems Society

Chapter: 13 (E25) Education Society

Chapter: 14 (RA24) Robotics And Automation Society

Chapter: 15 (NPS05) Nuclear Plasma Sciences Society

Chapter: 16 (CIS11) Computational Intelligence Society,  
(SMC28) Systems, Man and Cybernetics Society

Chapter: 17 (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 & Formatted By**

**Sharan Kalwani,**  
**Wavelengths,**  
**2017 ~ 2020**

## Non-IEEE 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 changing 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 e-Wavelengths:

[www.e-wavelengths.org](http://www.e-wavelengths.org)

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 IEEE Local Meetings:

<http://www.e-wavelengths.org/>

## Other Happenings

Here are some of the non-IEEE events 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.

Send details to: [wavelengths@ieee-sem.org](mailto:wavelengths@ieee-sem.org)

**Michigan Institute for Plasma Science and Engineering:** Seminars for the 2018-2019 academic year: <http://mipse.umich.edu/seminars.php>

**Model RC Aircraft**  
<http://www.skymasters.org/>

**Model Rocketry**  
<http://team1.org/>

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

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

**Robots**  
<http://www.therobotgarage.com/about-us.html>

**Science Fiction Conventions**  
<https://2019.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 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 Christopher Johnson, the section secretary at: [cgjohnson@ieee.org](mailto:cgjohnson@ieee.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.

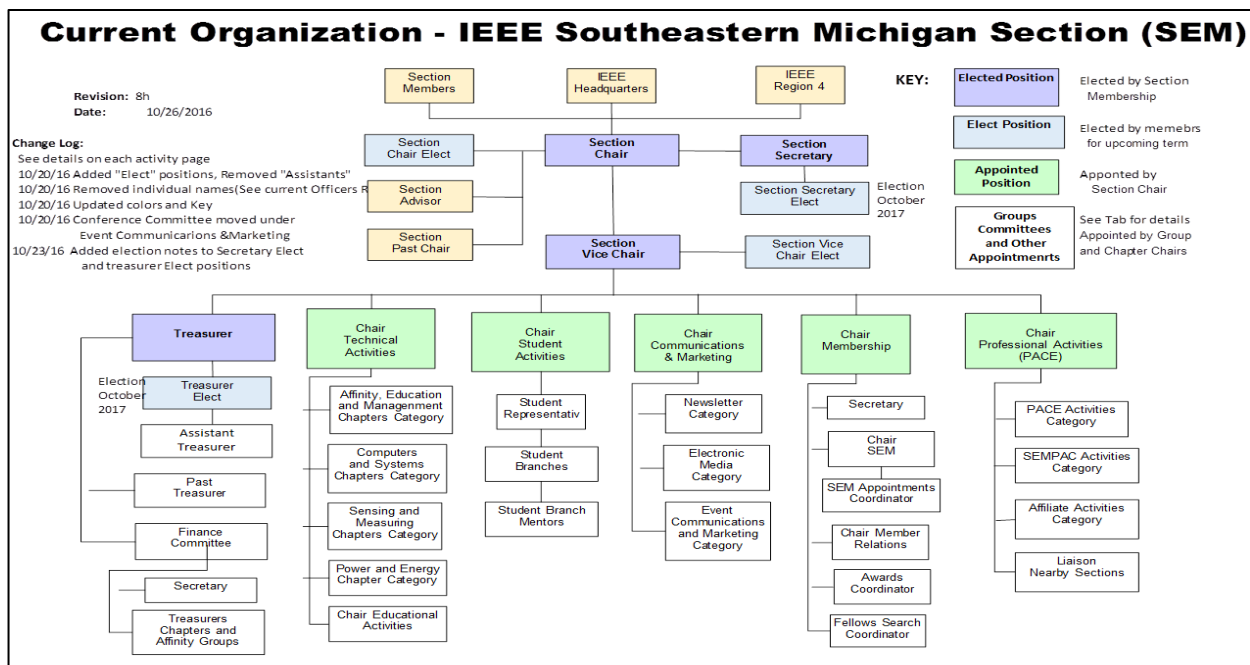
However, members of the section may have multiple technical interests and would like to have meeting information of other chapters. In order to communicate the meeting dates of all the chapters, affinity groups etc., to our members to facilitate their attendance, leaders of the groups are requested to 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** - SEM Secretary

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**)



**ExCom Meeting Schedule**

Below is the 2020 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 2020 meetings. Or, link your personal calendar to the SEM Web calendar.

**Section Administrative Committee (ExCom) Meeting Schedule for 2020:**

**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**.

**Teleconference, Wednesday September 2 <https://events.vtools.ieee.org/m/216756>**

FACE TO FACE, Thursday October 7 <https://events.vtools.ieee.org/m/216971>

Teleconference, Wednesday November 4 <https://events.vtools.ieee.org/m/216759>

Teleconference, Thursday December 2 <https://events.vtools.ieee.org/m/216760>

Chris Johnson  
SEM Secretary  
[cgjohnson@ieee.org](mailto:cgjohnson@ieee.org)

## Editor's 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](mailto:wavelengths@ieee-sem.org)

OR

[sharan.kalwani@ieee.org](mailto:sharan.kalwani@ieee.org)  
[d.romanchik@ieee.org](mailto:d.romanchik@ieee.org)  
[nilesh.dudhaia@ieee.org](mailto:nilesh.dudhaia@ieee.org)  
[k.williams@ieee.org](mailto:k.williams@ieee.org)  
[cgjohnson@ieee.org](mailto:cgjohnson@ieee.org)

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

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

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

*You may have noticed a few new items in this month's edition. First of all, we have two entries from our Student Branches: University of Michigan-Dearborn and Lawrence Technological University. Delighted to welcome them board and the two articles they have contributed, telling us all about them and their plans for 2020.*

*Another new about to be a regular feature is Dan Romanchik's column on new things/ This time he writes to us about IEEE internet resources.*

*IEEE Day 2020 is coming up! Expect to hear more on that soon.*

*We also plan on starting a "letters to the Editor" column soon. Feel free to email away to help us get that started!*

### 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.

### Heads Up

We are contemplating making the submissions of articles and events for the Wavelengths, a little easier and a little more inviting. Ideas are of course welcome and to this end, we are toying with setting up a little "newsletter portal". Stay tuned for some news on that end!

### 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](mailto:wavelengths@ieee-sem.org) OR any one of the following:

[sharan.kalwani@ieee.org](mailto:sharan.kalwani@ieee.org)  
[d.romanchik@ieee.org](mailto:d.romanchik@ieee.org)  
[nilesh.dudhaia@ieee.org](mailto:nilesh.dudhaia@ieee.org)  
[k.williams@ieee.org](mailto:k.williams@ieee.org)  
[cgjohnson@ieee.org](mailto:cgjohnson@ieee.org)



*Wavelengths Annual Publication Plan for Articles*

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

*Wavelengths Annual Publication Plan for Personal Profiles*

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



## 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.)

### SEM LinkedIn Page

(Select the “” button under the top row.)

### 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 Secretary

Chris Johnson

### Section Vice-Chair

Sharan Kalwani

### Section Treasurer

Michael Folan

## Standing Committees:

### Section Adviser

Don Bramlett

### Chair Communications & Marketing

### Chair Educational Activities

Christopher Guirlanda

### Chair Finance

Nevrus Kaja

### Chair Membership Development

Sharan Kalwani

### Chair Nominations & Appointments

Kimball Williams

### Chair Professional Activities (PACE)

Sharan Kalwani

### Chair Student Activities

Mel Chi

### Student Representative

### Chair Technical Activities

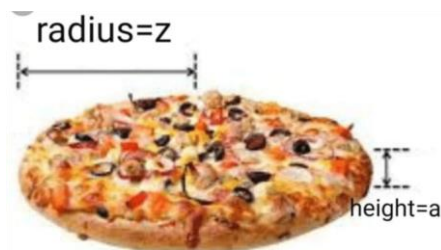
Jeffery Mosley

### Wavelengths Editor

Sharan Kalwani



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



$$\text{Volume of pizza} = \pi \times z^2 \times a$$

$$= \text{pizza}$$

How pizza got its name

### Advertising Rates

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

[http://www.ieee-sem.org/ewavelengths/?page\\_id=181](http://www.ieee-sem.org/ewavelengths/?page_id=181).

Please see the information listed on  
the site, and contact our web editor  
of e-Wavelengths, Nevruz Kaja, for  
further details.

### Leadership Meetings

#### SEM Executive Committee Monthly Teleconferences:

- 1<sup>st</sup> 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:  
<https://meetings.vtools.ieee.org/main>

#### 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:  
<https://meetings.vtools.ieee.org/main>