

*Florida West Coast  
Section (FWCS)*  
*Please Check the Website  
Often for UPCOMING EVENTS  
(Front Page Right Column)*  
<https://r3.ieee.org/fwc/>

# The SunCoast Signal

The Institute of Electrical and Electronics Engineers, Inc.

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## PE Corner

### Art Nordlinger, PE, Life Senior Member You Renewed Your License; Now What?

Professional Engineer license renewal in Florida is now done for another cycle. Hopefully, you have completed your continuing education requirements and renewed your license. Now what? If you are like many of us, you won't think about continuing education for another 20 or so months and then rush to get your hours done before the next renewal deadline. What are you going to do with all that spare time until then? Let me make a couple of suggestions.

You can earn double the hours by presenting a technical seminar to your peers under IEEE's continuing education program. Every one of us has an area of expertise. Sharing your knowledge with others provides personal satisfaction, as well as earning hours toward your next license renewal. Talk to me or any IEEE officer about topics that you can present and earn some hours.

Lend your spare time to IEEE as an officer or volunteer. Get involved! You'll help yourself, your peers, and IEEE as a whole. You can earn four Continuing Education Hours (CEHs) each renewal cycle for servicing as a professional society officer.

Mentoring a young engineer, or an engineer intern, is a very rewarding way to give back to the profession. There are many ways in which you can help our younger peers to advance in their careers. For example, you can encourage new engineers just out of school to take the FE (EIT) exam now while the information is still somewhat fresh.

*Continued on Page 2*

**Next ExCom Meeting**  
**Tuesday, April 1st, 2025**  
**Google Meet**  
**Register with vTools**  
<https://events.vtools.ieee.org/m/474811>

**IEEE FWCS ExCom**

**CHAIR:** Michael Mayor, michael.mayor@ieee.org  
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**PES/IAS Power & Energy/Industry Applications Joint Chapter:**  
Chair, Kayla Allemang, kalleman@ieee.org  
**RAS Robotics & Automation Chapter: Chair** Sean Denny,  
venner20@ieee.org.  
**SP/COMM Signal Processing / Communications Joint Chapter**  
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Chair, Diana Aristizabal, dianaaristizabal@ieee.org  
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RAS - Sahil Talwalkar, tsahil@outlook.com  
HKN - Anthony Parrinello, aparrinello1386@floridapoly.edu  
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**WEB PAGE:** <https://r3.ieee.org/fwc/>

**PE Corner - Cont'd from Page 1**

Few of us knew early in our careers where our path would ultimately lead. Those just starting out may not know at this early point in their careers whether they'll need to have a PE license someday or not. We all know that if you don't take the FE exam shortly after graduation, it's a pretty monumental task for most engineers to "re-learn" enough of what they learned in college to pass the test. Just the thought of studying all of that material in order to pass can be daunting. A recent change to the licensure rules has "uncoupled" the experience requirement from registering to take the Principles and Practices exam (the PE exam). This change may benefit some new engineers in completing the exam and experience requirements for professional licensure.

Those are just a few suggestions of the endless opportunities that we all have to give back to the industry. I hope that you are able to avail yourself of some of these in the near future.

**New Mailing Address!!!****IEEE Florida West Coast Section****P.O. Box 176****Land O' Lakes, FL 34639-9998**

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Contact: [michael.mayor@ieee.org](mailto:michael.mayor@ieee.org)  
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## GE/ITI Clearwater Instrument Transformer & Capacitor Facility

- Date:** Friday, April 4, 2025  
**Time:** 9:00AM – 1:30PM (EST/EDT)  
**Speaker:** Ryan Alkire – GE Vernova  
**Location:** GE/ITI Clearwater Factory - 1925 Calumet St, Clearwater, FL 33765  
**Cost:** \$20 Members/\$40 Non-Members/\$10 Student Members  
**CEH Credits:** Two (2) CEHs  
**RSVP:** Online at: <https://events.vtools.ieee.org/m/460948>  
 \*\*\*Seats are limited to 30 attendees\*\*\*
- Questions:** Kayla Allemang - [Kallemand@ieee.org](mailto:Kallemand@ieee.org)  
 Nicole Ouelette – [ouelletten@usf.edu](mailto:ouelletten@usf.edu)  
 Raymond Walker - [rwalker4531@floridapoly.edu](mailto:rwalker4531@floridapoly.edu)

The IEEE Florida West Coast Section Power & Energy Society/Industry Applications Society (PES/IAS), in partnership with GE Grid Solutions, invites you to an exclusive tour of the GE/ITI Clearwater Instrument Transformer Facility. This facility is GE's primary manufacturing site for instrument transformers rated below 69 kV, producing over 500,000 dry-type transformers annually for utility and industrial applications. This event will feature two key components:

### Classroom Session (2 hours):

Gain a deeper understanding of instrument transformers, including what sets them apart, their various types, applications, and how to interpret nameplate data. The session will also explore their role in the industry's future and include an introduction to capacitors.

### Factory Tour (1.5 hours):

Experience a guided walk-through of the factory floor, observing key processes such as component production, core manufacturing, transformer winding, casting, and final testing. As a special addition, the tour will include a brief visit to the capacitor production area, located in the same facility.

A complimentary lunch will be provided following the tour.

**Participants are required to wear safety shoes and safety glasses.** The facility does have safety shoe covers available, but supplies are limited, please include during registration if you will need a shoe cover + shoe size. Hearing protection will be provided at the necessary locations. Additional information regarding parking and other instructions will be provided ahead of the event via email to those registered.

**Ryan Alkire** is a Senior Engineering Manager for GE Vernova. In this role, he manages a team of engineers whose key responsibilities are designing, maintaining existing designs, and supporting production for the instrument transformers manufactured in Clearwater. Prior to his current role, Ryan obtained his Bachelor of Science in Electrical Engineering from the University of South Florida and holds a Master of Science in Engineering Management from USF. Ryan has been an IEEE member for 10 years



Article by Sean Denny

Photos by Sean Denny & Emma Alaba

I attended the 2025 Tampa Bay Engineers Week Banquet on Thursday, February 20, 2025. We returned to the Bryan Glazer Family Jewish Community Center. I arrived early at 5:00pm to attend the pre-dinner networking. I greeted the guests while enjoying the food, drink, and engineer vendors during the pre-dinner networking in the ante-room lobby.

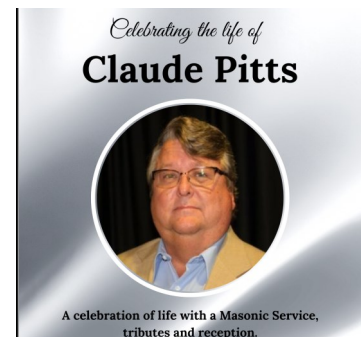
I welcomed each Lignell Teacher, IEEE Members, and School Officials. I interviewed the Lignell Teachers Carissa Deneca and Marie Puskas. Robofest Chair Emma Alaba attended as my guest and helped take photographs at the dinner. After 6:30pm, we were invited into the ballroom for the Banquet.

Don Germaise took the position of Master of Ceremonies to announce the theme "Design Your Future" and calling everyone to take a seat. Eight Engineering Organizations worked together to organize the 44<sup>th</sup> Engineers Banquet.

IEEE FWCS Chair Michael Mayor gave a tribute to the late Claude Pitts. Claude's son, Phillip and his wife were guests at the IEEE table. Michael Mayor had copies of the Tribute issue of the FWCS Signal Newsletter.



Michael Mayor, MSE, PE  
Chair, Florida West Coast  
Section, giving Eulogy for  
Claude Pitts



Claude Pitts, Long time  
and Very Valued IEEE  
Member and FWCS Vol-  
unteer



The students from five Engineering Organizations won Student Engineer Awards first. IEEE Student was Nicole Ouelette from USF. Mr. Germaise announced the Lignell winners individually as I photographed them on the stage. The committee under the leadership of Tara Kivett and Michelle Navar chose two Hillsborough County teachers for the Lignell Award this year which included: Marie Puskas (Steinbrenner High School Math) and Carissa Deneca (Gaither High School).

Hillsborough County Schools Math Supervisor Dr. Gail Stewart volunteered to present the Lignell Awards. We took group pictures with the winners. Then we enjoyed dinner of chicken, mashed potatoes, carrots, salad, and chocolate cake. The Keynote Speakers: Doctors Ken Kremer and Jean Wright both from NASA, who were eyewitnesses to NASA Human & Robotic Explorers and Sew Sister to the Stars.



Ron Ambrosio was our IEEE Florida West Coast 2025 Engineer of the Year. Emma won the centerpiece. The committee took a bow and had a group picture on the stage before going home.

Banquet Chair Tara Kivett exclaimed, *“The banquet was a big success! I truly appreciate and thank you all for your hard work, time, and expertise in planning and executing this event.”*



# AWARD WINNERS



# Social Gatherings



# STEM BEAM EVENT

March 11, 2025

St Petersburg College Clearwater Campus

2465 Drew St, Clearwater, FL 33765

Article by Sean Denny (STEM Champion/RAS Chair),

Photos by Emma Alaba (RAS)



As STEM Champion, I had already participated in STEM Explorer Fest on January 18, 2025. I worked with Dr Sidney Martin IEEE Member from St Pete College to arrange IEEE Florida West Coast Section's involvement. We were going to have another STEM Day last October 2024 until Hurricane Milton forced it to reschedule on March 11, 2025. We announced it through V-Tools and the Signal Newsletter to invite those who wished to participate.

We chose the lesson plan "Popsicle Bridge Construction" on TryEngineering.org. SPC Teachers Brenda Thompson and Dr Sidney Martin provided popsicle-sticks and glue guns.

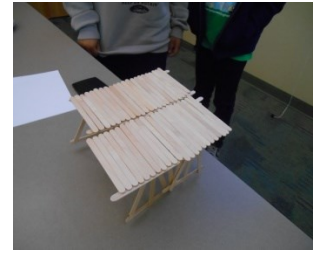
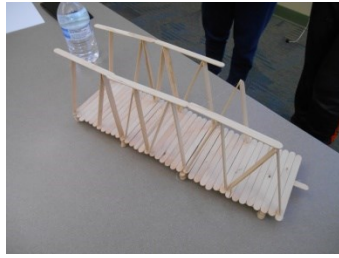
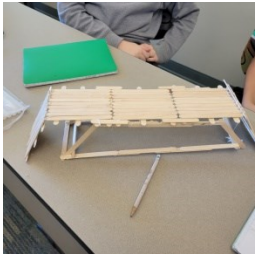
Emma Alaba and I arrived at the school by 8am to setup in Room NM201.A class of 18 students arrived from Clearwater Fundamental for a 60 minute activity at 10:30am.

Dr. Martin said "The BEAM program aims to inspire Pinellas County students, SPC Titans, alumni, and community members to explore career opportunities in Manufacturing, Engineering, Construction, and Architecture. Last year's event (MECCA) successfully highlighted these exciting fields, and we hope to build on that momentum with your support. Your participation will not only provide valuable insights but also encourage younger students to envision a future with your organization."

After our brief introduction, we asked students to read a paragraph describing the types of Bridges: Arch, Beam, Cable, Cantilever, Suspension, and Truss. The students were challenged to design and build bridges to withstand the weight of a small water bottle.

*Continued on Page 7*

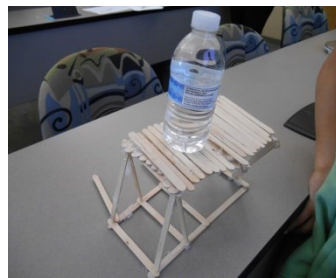
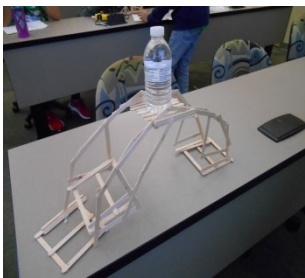




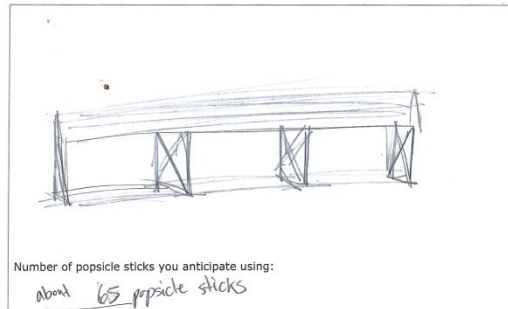
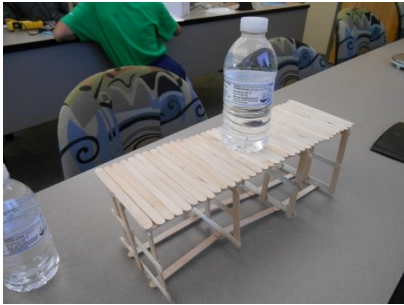
After 20 minutes, each group had the opportunity to defend their object with the following questions:

- 1) *Did you succeed in creating a bridge that held the required weight for a full minute? If not, why did it fail?*
- 2) *Did you decide to revise your original design while in the construction phase? Why?*
- 3) *How many popsicle sticks did you end up using? Did this number differ from your plan? If so, what changed?*
- 4) *What was the average aesthetic score for your bridge? How did this compare to the rest of the class? What design elements of other bridges did you like the best?*
- 5) *Do you think that engineers have to adapt their original plans during the construction of systems or products? Why might they?*
- 6) *If you had to do it all over again, how would your planned design change? Why?*
- 7) *What designs or methods did you see other teams try that you thought worked well?*
- 8) *Do you think you would have been able to complete this project easier if you were working alone? Explain...*
- 9) *What sort of trade-offs do you think engineers make between functionality, safety, and aesthetics when building a real bridge?*

A group of twenty-one students took the second hour and also did exceptionally well. Overall, most students commented they wished for more time and described what kind of modifications they would have done to improve their bridges. The students had a lot of fun and took their creations with them. This made the day worth our efforts especially when a teacher came back and said a girl who attended the workshop was the highlight of their trip.



*Continued on page 8*



The Students had fun with the project and I did my best to involve as many as possible. Age was ideal and the number of students assigned by the school. I asked the five questions after each team came up to describe how they came up with their model. I was able to follow along and inspire the students within the 60 minutes allotted.

**Sean P Denny**  
[venner20@ieee.org](mailto:venner20@ieee.org)  
**IEEE Senior Member**  
**Teacher In Service, R3 Florida West Coast Section**  
**Chair/Secretary, IEEE FWCS Robotics and Automation**





## Drone and AI Applications for Major Storm Events

- Date:** Friday, May 16, 2025  
**Time:** 10:00AM – 3:00PM (EST/EDT)  
**Speaker:** Todd Fountain – Duke Energy  
 Jackson Rollins – Duke Energy  
 Sacha Fontaine – SAS Institute  
**Location:** Tampa Electric Eastern Service Area - 820 S 78th St, Tampa, FL 33619  
**Cost:** Members: \$100; Non-Members: \$200; Students: \$10  
**CEH Credits:** Four (4) CEHs  
**RSVP:** Online at: <https://events.vtools.ieee.org/m/467360>  
**Questions:** Kayla Allemang - [Kallemand@ieee.org](mailto:Kallemand@ieee.org), Regan Sink – [rjsink@ieee.org](mailto:rjsink@ieee.org)

This seminar explores the role of drones and artificial intelligence (AI) in enhancing storm preparedness, response, and recovery. The session provides insights into leveraging cutting-edge technology to improve resilience and operational efficiency during major storm events.

### Key Topics:

1. Pre-Landfall Applications
2. Post-Landfall Applications
3. AI-Enhanced Utility Applications
4. Technological Overview
5. Case Studies and Best Practices

### Demonstrations

### AI Applications:

For utilities utilizing drone and field imagery for line inspections, this presentation will detail the automatization of asset and deficiency detection with computer vision strategies that improve accuracy and reduce development time. Deployment of these strategies can be performed in real-time while in flight or in batch-processing. The mapping of results onto a GIS-enabled map with matches to utility asset IDs is in its final stages. Demonstration videos will be shown.

**Todd Fountain** is the General Manager of Emergency Preparedness and Regional Incident Commander for Duke Energy Florida, with over 33 years of experience in the energy industry. In his tenure, Todd has played a critical role in emergency response, leading teams throughout numerous storm events, from Hurricane Andrew to the most recent Hurricane Milton.

**Jackson Rollins** is Director of Unmanned Aerial Systems within the Aviation Department at Duke Energy. Jackson leads a team of 40-50 pilots internal to Duke Energy and is responsible for governance of drone usage and vendor engagement across the enterprise. His team deploys to affected areas after a major storm and assists the T&D organization, Generation, and Corporate Communication with aerial assets.

**Sacha Fontaine, P.E.** is a leader in the power, utilities, and renewables sector with over two decades of industry-forming experience. As Head of Utility AI Strategy at the renowned SAS Institute, Sacha is passionate about developing and delivering innovative AI solutions that tackle the complex challenges faced by utilities. Sacha brings a wealth of diverse perspectives and experiences from his previous roles at industry giants like Duke Energy, GE, and Siemens.



**Join Us April 1-6, 2025, | Lakeland, FL  
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4075 James C. Ray Dr., Lakeland, FL 33811  
(863) 644-2431  
Details: <https://flysnf.org/>**

### What We Are

From its humble beginnings in 1974 as a fly-in for sport aviation enthusiasts, the SUN ‘n FUN Aerospace Expo has grown into one of the largest and most successful aviation events on earth. We are Florida’s largest annual convention of any kind, and each year over 200,000 visitors flock to what has become known as “Aviation’s Season Opener” or “Spring Break for Pilots.”

Pilots flying into the Expo are fascinated by the vision of hundreds of aircraft showcased in all shapes and sizes. Aircraft areas include Vintage, Homebuilt, Aerobatic, Warbird, Jet, and Light Sport. To serve all those flying in, a major trade show is part of SUN ‘n FUN. Over 500 exhibitors have an incredible lineup of products and services, hands-on workshops teach hundreds of building and maintenance skills, and dozens of forums educate pilots and maintainers about safety, new products, and an infinite number of other timely topics. Not just for pilots, SUN ‘n FUN has STEM and Career Fair activities, plus a Family Oasis and, of course, our world-famous daily and night airshows that feature breathtaking displays from dozens of military and civilian performers.

### Our Cause

SUN ‘n FUN Fly-In, Inc. is a 501 (c)(3) non-profit that markets and supports dozens of year-round events, including the Aerospace Expo. Proceeds from these events are the primary source of funding for The Aerospace Center for Excellence (ACE), which has emerged as a nationally recognized leader in STEM-related and aerospace education through its various learning centers, outreach programs, scholarships, and summer camps aimed at engaging, educating and accelerating the next generation of aerospace professionals.

In addition to SUN ‘n FUN, ACE is the home of the Florida Air Museum, Florida’s Official Aviation Museum and Education Center, and the Lakeland Aero Club, which is the country’s largest high school flying club. ACE is the world’s leader in producing licensed teenage private pilots and delivers youth programs that engage over 50,000 students a year.

### Mission Statement

“Preserve and Enhance the Future of Flight Through World Class Events, Inspiring and Educating People of All Ages”

**Florida West Coast Section - Upcoming Events Summary - Year 2025**

Date / Location/Time	Organization	Description Website	V and/or P*	Contact email
May 19-22	IEEE FWCS	Fog and Mobile Edge Computing	P	Muhammad Al-Abdullah
University of Tampa	Computer Society	<a href="https://emergingtechnet.org/FMEC2025/">https://emergingtechnet.org/FMEC2025/</a>		<a href="mailto:mal-abdullah@usf.edu">mal-abdullah@usf.edu</a>
	IEEE FWCS	Modern Computing Networking and Applications	P	
	Computer Society	<a href="https://mcna-conference.org/2025">https://mcna-conference.org/2025</a>		
	IEEE FWCS	Intelligent Cybersecurity Conference	P	
	Computer Society	<a href="https://icsc-conference.org/2025">https://icsc-conference.org/2025</a>		
May 26-30	IEEE Biometrics	IEEE 19th International Conference on	P	Shaun Canavan
Tampa / Clearwater	Council	Automatic Face and Gesture Recognition		<a href="mailto:scanavan@usf.edu">scanavan@usf.edu</a>
	Computer Society	<a href="https://ieee-biometrics.org/conferences/flagship/fg/">https://ieee-biometrics.org/conferences/flagship/fg/</a>		

\*Attendance: V: Virtual --- P: In Person - V & P: Virtual and In Person

## IEEE at Florida Poly – 2025 Engineering and Science Student Research Symposium

In Person

Bldg.: BARC, 4700 Research Way, Lakeland, Florida, United States, 33805

April 5, 9:00 AM - 5:00 PM

<https://events.vtools.ieee.org/m/466164>

## FWCS Computer Society Monthly Meeting Virtual

Thursday, April 3, 2025, 10:30 pm - 11:30 pm

<https://events.vtools.ieee.org/m/467480>

## FWCS PES/IAS ExCom Meeting March 29, 2025, 7:30 am - 8:30 am

In Person

215 N Dale Mabry Hwy, Tampa, Florida, United States, 33609

<https://events.vtools.ieee.org/m/450354>

### SunCoast Signal Advertising Rates

Size	1 Month		6 Months		12 Months	
	Member	Non-Member	Member	Non-Member	Member	Non-Member
Business Cards	\$25	\$35	\$120	\$150	\$210	\$252
1/4 Page	\$40	\$52	\$190	\$380	\$335	\$402
1/2 Page	\$75	\$98	\$360	\$450	\$630	\$756
3/4 Page	\$110	\$143	\$530	\$663	\$925	\$1,110
Full Page	\$140	\$182	\$670	\$838	\$1,175	\$1,410
Insert / Sheet	\$200	\$260	\$800	\$1,000	\$2,000	\$2,400

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*Florida West Coast Section Tampa*

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April 2025 - Calendar of Events <i>(For more information see "Inside the SunCoast Signal" → Page 1)</i>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
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		*FWCS ExCom →Page 1		*FWCS CS Monthly Meeting ->Page 13	*GE/ITI Clearwater Tour ->Page 3	*Florida Poly Symposium ->Page 13
6	7	8	9	10	11	12
	*Signal Inputs Due End of Day					
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20	21	22	23	24	25	26
				*PES/IAS ExCom ->Page 13		
27	28	29	30			