

Collier, Hendry, Highlands, Levy and



Advancing Technology for Humanity

## Florida West Coast Section (FWCS)

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There is NO Print Edition
Also, it can be downloaded
from the FWCS website:

https://r3.ieee.org/fwc/new sletter-archive/

#### The SunCoast SIGNAL Newsletter

The Institute of Electrical and Electronics Engineers, Inc.

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Next ExCom Meeting Tuesday, December 2nd, 2025 Google Meet Register with vTools

https://events.vtools.ieee.org/m/514833

#### PE Corner Art Nordlinger, PE, Life Senior Member The Steps to Professional Licensure, Part 2

In my last column I discussed the beginning of the route to get your Professional Engineer license; taking the FE exam. This month I will focus on the next step, experience required and being an Engineering Intern (EI).

If an EI graduated with 4-year engineering degree, they must obtain 48 months of experience to qualify to apply to be a PE. An EI graduating with an approved Engineering Technology degree will need to complete 72 months of experience before being qualified to apply to be a PE.

What qualifies as experience? The type of employment considered acceptable must principally involve activities in the field of engineering as defined in *Section 471.005(7)*, *F.S.* What qualifies as "experience" is found in *61G15-20.002*, *F.A.C.- Experience*. Some criteria considered for meeting the requirement includes:

Experience that logically follows and incorporates an application of the engineering education previously obtained.

Full-time experience obtained within 2 years of completing the engineering degree, that involves tasks and responsibilities consistent with the disciplines of engineering. Pregraduation experience credit may be awarded at 50% of actual time, with total allowable credit for pre-graduation experience to not exceed 12 months.

Continued on Page 2

#### **IEEE FWCS ExCom Members**

CHAIR: Michael Mayor, michael.mayor@ieee.org VICE CHAIR: Andrew Seely, andrew.seely@ieee.org SECRETARY: Chung Seop Jeong, PhD, jeong@ieee.org

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EMBS Engineering in Medicine & Biology Chapter: Sylvia Thomas, sylvia@usf.edu

PES/IAS Power & Energy/Industry Applications Joint Chapter: Chair, Kayla Allemang, kallemang@ieee.org

RAS Robotics & Automation Chapter: Chair Sean Denny, venner20@ieee.org.

SP/COMM Signal Processing / Communications and Blockchain Group, Chair, Michael Ramalho, PhD, mar42@cornell.edu

WIE Women in Engineering Affinity Group: Chair, Diana Aristizabal, dianaaristizabal@ieee.org

**LIFE MEMBER Affinity Group:** Chair Richard Beatie, PE, r.beatie@ieee.org

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#### **USF STUDENT BRANCH ADVISORS:**

Dr. Andrew Hoff, Co-Advisor, hoff@usf.edu, Dr. Chung Seop Jeong, Co-Advisor, jeong@usf.edu STUDENT ACTIVITIES

Student Activities Chair, Ronald Ambrosio ron.ambrosio@ieee.org

#### **University of South Florida Chairs**

Student Branch - Joshua Basso, bassoj@usf.edu CS - Anzhelika Kurnikova, akurnikova@usf.edu EDS - Luis Quevedo, lquevedo@ieee.org PES - Nguyên Hong, nguyenhaohong@usf.edu HKN - Roberto Montero, roberto.montero@ieee.org

Florida Polytechnic University Chairs

Student Branch - Colby Bradford, colby.bradford@ieee.org CS - Cyler Gabel, cgabel3645@floridapoly.edu PES - Will Carroll, wcarroll4993@floridapoly.edu

RAS - Sahil Talwalkar, tsahil@outlook.com HKN - Jacob Brescia, jbrescia4902@floridapoly.edu

WEB MASTER: TJ Ross, a.j.ross@ieee.org

WEB PAGE: https://r3.ieee.org/fwc/

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

Experience on engineering projects that is progressive in nature, indicating an increase in quality and involving greater responsibility.

Experience gained under the supervision of a licensed professional engineer.

Experience gained in engineering research and design projects by members of an engineering faculty where the program is approved by the Board.

Experience that includes demonstration of a knowledge of engineering, mathematics, physical and applied science, properties of materials, and the fundamental principles of engineering design.

Experience that includes demonstration of the application of engineering principles in the practical solution of engineering problems.

A masters or doctorate engineering degree can count as 1-year of experience.

Additionally, an applicant must list three (3) personal references who are professional engineers.

These references cannot be the same individuals used to verify employment and experience.

To learn more about the examination and application process for the FE and PE exams go to the *Application Process* page under the *Licensure* section of FBPE's website at *www.fbpe.org*.

If you have questions related to qualifying experience contact the Board office at (850) 521-0500 and ask to speak to someone in the *Licensure Department*.

Next month I'll discuss the final step to licensure, the PE exam.

# SUCCESFULLY CONDUCTED FWCS YEAR END GALA AND AWARDS BANQUET\*

SATURDAY, OCTOBER 25, 2025





St. Pete Yacht Club, Banquet Room

Guy Perry, MC

#### **SPEAKERS**



Hulya Kirkici, PhD



Isam El Naqa, PhD



Pathak Prabhakar, PhD

#### **RECOGNITION PLAQUES**

#### Presented by

#### Hermann Amaya



Hulya Kirkici, PhD



Isam El Naga, PhD



Pathak Prabhakar, PhD

#### **STUDENT AWARDS**

Presented by

#### **Ronald Ambrosio - Chair, Student Activities**



Nathan Moses-Casio Vice Chair USF Student Branch



University of South Florida Computer Society Anzhelika Kurnikova Cesar Calderon Elan Berezovsky



Cyber Gabel Florida Poly CS Branch Chair

## MEMBER RECOGNITION Presented by Andrew Seely Vice Chair, Florida West Coast Section



Hermann Amaya
Outstanding Accomplishments
as a Life Senior Member



Michael Mayor, MSE, PE Educator of the Year Chair, Florida West Coast Section

Certificates Awarded to the following Members, which were not present

Muhammad S. Ullah, PhD; Nuredin Joehar; Mrunal Gangrade For Outstanding Contributions to the SoutheastCon 2028 proposal



Holding the Certificates are: Andrew Seely, Barrett Werner and Leandro Maciel



## TAMPA BAY E-WEEK BANQUET

This premier event celebrates excellence in STEM across our community. Local leaders and engineering professionals come together to honor outstanding Engineers, Science and Math Teachers, Students, and Young Professionals. The banquet also features the Lignell Awards, presented to exceptional high school educators advancing STEM education and inspiring future engineers. Hosted through the combined efforts of the Engineering Societies of West Central Florida, this event unites professionals from across Tampa and Florida's west coast to recognize achievement and promote the next generation of innovators.



### John "Jay" B. Rogers, Jr. CEO & CO-FOUNDER

#### The Hard-Won Lesson: Transforming Challenge into Success

In this candid and inspiring keynote, Jay will reveal how turning over the reins to Local Motors - which he poured everything into - became the essential experience that fueled his latest, most ambitious endeavor. Join this opportunity to learn how to extract insights from challenging experiences, embrace unexpected transitions, and find the courage to Transform Your Future.





PROUDLY SUPPORTED BY FLORIDA'S ENGINEERING SOCIETIES





























#### SPEAKER LEVEL SPONSORSHIP \$2000

- · Front Row Center Table with Speaker at Your Table
- Company logo displayed on signage at the event
- Receives up to 10 tickets
- Presents the Lignell Award
- Recognition at Speaker Sponsor level on event slideshow & program
- Recognition and link to website on the TBEWB website. Information about company and special acknowledgement will be made on the website
- Display Table in Reception Area

#### PLATINUM LEVEL SPONSORSHIP \$1500

- Company logo displayed on signage at the event
- · Receives up to 10 tickets to the awards banquet
- Recognition at Platinum Sponsor level on event slideshow & program
- Recognition and link to website on the TBEWB website. Information about company and special acknowledgement will be made on the website
- Display Table in Reception Area

#### GOLD LEVEL SPONSORSHIP \$1200

- · Company logo displayed on signage at the event
- Receives up to 5 tickets to the awards banquet
- Has company logo displayed at Gold Sponsor level on event slideshow & program
- Recognition and link to website on the TBEWB website
- Display Table in Reception Area, (if space available)

#### SILVER LEVEL SPONSORSHIP \$900

- Company logo displayed on signage at the event
- Receives up to 2 tickets to the awards banquet
- Has company logo displayed at Silver Sponsor level on event slideshow & program
- Recognition and link to website on the TBEWB website

#### BRONZE LEVEL SPONSORSHIP \$750

- Receives display table to present company products during the Pre-Dinner Social
- Recognition at the Bronze level in program and on the TBEW website
- · receives up to 1 ticket to the awards banquet

#### VENDOR LEVEL SPONSORSHIP \$500

- Receives display table to present company products during the Pre-Dinner Social.
- Recognition at Vendor level in program and on the TBEWB website

#### COMPANY SPONSOR TABLE \$1000

· Receives up to 10 tickets to the awards banquet

#### \$900 EARLY BIRD PRICING

\*If purchased before 1/31/2026\*

FOR MORE INFORMATION
Carissa Gudenkauf
E-Week Chai, USFEAS and SWE

carissa@mvp-results.com

#### PLEASE MAKE CHECKS PAYABLE TO:

IEEE FWCS PO Box 176 Land O Lakes, FL 34639

#### NOTE:

All donations may be tax deductible. FIN #13-1656633

https://r3.ieee.org/fwc/





#### HARVEST CROO

**November 14, 2025** Tampa, FL Article by Sean Denny (STEM Champion/RAS Chair), **Barrett Werner (RAS Recording Secretary)** 





**IEEE Florida West Coast Section Robot**ics and Automation Society Chapter were invited to Tour Harvest Croo on November 14<sup>th</sup>, 2025. IEEE members, USF and FL Polytech Students arrived by 4pm totaling 17 in attendance. Harvest Croo builds automated harvesters for picking four rows of strawberries at a time that service farms down in Par-sisted with the opening presentation. rish, FL.

We began our tour in the conference room where the business was explained. Barrett Werner led the presentation and two team members, Ken Gardner, Director of Autonomous Development, and Joel Meine, Senior User Experience and Customer Experience Designer & Strategist, had dialed in and as-

Continued on Page 9

#### Harvest Croo - Cont'd from page 8

Truck Trailer. The harvester picks, washes, inspects and packs the strawberries to send to market. The machine is designed to address a labor shortage in picking and drives down the cost for the consumer. The robot's stereo camera system utilizes a Machine Learning

From a distance, it looks like a Semi- (ML) model to determine the ripeness of the berries to ensure only ripe berries are harvested. In the inspection system, another ML model is used to detect disease to ensure only quality berries are packed to be sold.





Later, we toured the machine shop and had a robot demonstration. Barrett showed the robot picking multiple berries on one of their robot test rigs. They research and improve the data modeling in house.

Erik Schroeder, a Senior Mechanical Engineer, explained the grippers are FDA approved to resist mold and are detached for cleaning after every shift.

Please check out: https://www.harvestcroorobotics.com/

Sean P Denny; venner20@ieee.org **IEEE Senior Member** Teacher In Service, R3 Florida West Coast Section Chair, IEEE FWCS Robotics and Automation





the University of South Florida









On November 8th, 2025, the IEEE Computer Society Student Branch Chapter at the University of South Florida hosted TechX Florida 2025, a free tech conference about artificial intelligence (AI) at the USF Tampa Campus. The conference is one of over a dozen TechX conferences throughout the world sponsored by the IEEE Computer Society Student & Young Professional Activities Committee. TechX Florida 2025, like TechX Florida 2024 at USF, was the only TechX hosted in IEEE Regions 1– 7 (US & Canada).

Over 540 registrations led to 336 in-person attendees, out of which 51.5% were students from the University of South Florida, 34.8% were guests from industry, and 13.7% were students from 9 universities across the country. On the day of the event, 22 mighty volunteers were handling the event execution, including the key organizers, IEEE-CS at USF students such as Anzhelika Kurnikova (Chair), Vama Shah (Vice-Chair), Egor Kharitonov (Tech Chair), Elan Berezovskiy (Treasurer), and Sofia Mitsuyuki (Outreach Chair).

TechX Florida 2025 featured 2 simultaneous tracks of talks about AI, with 11 talks in total, by industry leaders from companies like Microsoft, Intel, Verizon, Jabil, JP Morgan Chase, and more. Moreover, it included a panel with 5 panelists about "Careers in Tech" by Careers in Technology from IEEE Northwest Florida, who facilitate interaction between attendees and panels of industry experts throughout the southeastern US. As Careers in Technology commented, it was the 2nd largest in-person attendance ever since the existence of the initiative in 2010.

In addition to the insights from talks, TechX Florida 2025 made an emphasis on professional development and connection to industry. It included free headshots by a professional photographer with an IEEE Computer Society branded backdrop sponsored by the IEEE Region 3 Young Professionals. Over 83 attendees participated in the headshots that were provided for 3 hours of the conference.

Continued on Page 11

#### TechX Florida - Cont'd from Page 10

Moreover, TechX Florida 2025 hosted a 5 hour long career fair with 9 participating organizations, including Verizon, Uber AI Solutions, USF Central IT, ISACA, and more. From those 9 organizations over 30 employees showed up to support the career fair. Also, the conference featured 2 networking sessions throughout the day.

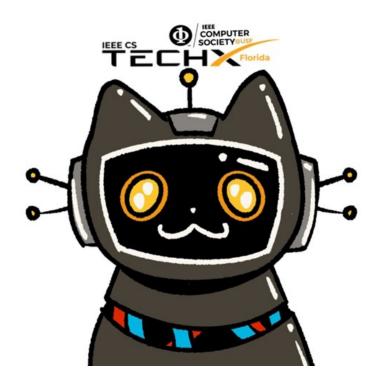
The conference marketing campaign attracted 253,000 views on Instagram, reaching over 16,000 unique accounts, and 27,000 impressions on LinkedIn.

Check out the official conference website at

#### https://techxflorida.com/.

In addition, TechX Florida 2025 offered free complimentary coffee and donuts for the morning networking session as well as free lunch for all of its attendees. Free IEEE Computer Society branded merch was provided to everyone as well as the IEEE Computer Society Student Branch Chapter at the University of South Florida famous cat stickers.

Lastly, the IEEE-CS at USF team hosted a Social and Fundraiser for TechX Florida 2026 in the evening of TechX Florida 2025 called "TechX After Dark" with over 60 attendees. It provided one more opportunity for students and professionals to socialize in the more intimate setting with food as well as emphasized promoting the IEEE Computer Society memberships.



TechX Florida 2025 would not be possible without the financial support from the IEEE Florida West Coast Section and outreach support from the IEEE Computer Society Florida West Coast Section! See you at TechX Florida 2026!





Florida West Coast Section



#### STUDENT ACTIVITIES

### Colby Bradford, FL Poly Student Branch Chair, colby.bradford@ieee.org

Here at IEEE FL Poly we had an awesome October filled with fun and engaging events! Moving into November we are winding down for the Fall Semester with some final events and getting started on plans for an even better Spring Semester.

#### Jacob Brescia, IEEE FL Poly HKN Chair

**HKN- IEEE HKN Mu Omega** has completed 2 highway cleanups this semester, with a total of 200 lbs. of trash collected off the side of State Road 33. IEEE.

**HKN Mu Omega is hosting** a Professional Engineering Speaker Event at Florida Polytechnic University Thursday 11/13.



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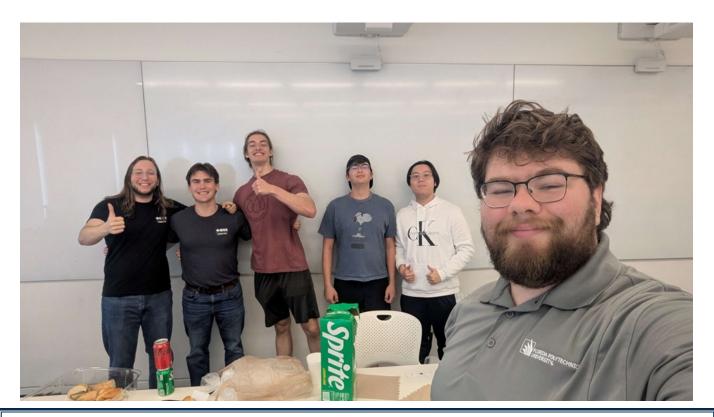
#### Student Activities - Cont'd from Page 12

## Sahil Talwalker, IEEE FL Poly RAS Chair R.A.S.- The Fall Semester is winding down, and we want to make sure we are prepared for Southeast Con next year. We split up the group meetings into one-on-one sessions and will be focusing on trying to get everyone to get their practice in learning a new skill. We have been focusing on getting one mechanism out week by week to get ourselves to a fully complete robot a lot sooner than before.

Will Carrol; IEEE FL Poly PES Chair P.E.S.- This month the PCB Competition with RAS concluded, with a winner being announced and their design being chosen for the Robotics Competition. The soldering workshop also took place, teaching students about J-STD, with roughly 80 students attending both for IEEE and for personal projects/skills and design. And finally, the mock circuit competition is being held soon, where students will be able to get familiar with their teammates for the upcoming circuit competition next semester, for the chance to attend Southeast Con.

C.S.- Computer Society has had an awesome past month of speaker events, workshops on Docker and Rust, and continuing work on the Escape Room Project! They also participated in the IEEExtreme programming competition and had sponsorship/proctoring by FWCS Young Professionals Chair Aedan Casey. Big thanks to FWCS Young Professionals! Going forward they plan to continue escape room work and start preparing their programming team for Southeast Con programming competition. Look out Southeast Con!

For the student branch, our big event for October was our collaboration with the FL Poly American Society of Mechanical Engineers Student Chapter, FL Poly Career Services, and Lakeland Electric. We hosted engineers from Lakeland Electric to talk to students about a day in their jobs, what skills to look for, certifications to go for, and other general advice. Moving into November, planning for Southeast Con is underway, and planning for our own Engineering and Science Student Research Symposium is beginning! Be sure to be on the lookout for more info on ESSRS 2026 coming soon, we'd love to see you there!





The SunCoast Signal

Vol. 71, No. 12, Dec. 2025

Year 2025 -	Florida West Coas	st Section - Upcoming Events Summary	<b>A*</b>			
Date / Time	Organization	Description				
	Contact	email / Registration / Website / Venue				
Thursday, Dec 4	FWCS - CS	<b>Monthly Meeting</b>	V			
6:30 pm - 7:30 pm	Antra Melhotra	antra.malhotra@ieee.org				
		https://events.vtools.ieee.org/m/503833				
*Attendance: V: Virti	ual P: In Person	V & P: Virtual and In Person				

Florida West Coast Section - SunCoast SIGNAL Advertising Rates							
Contact: Michael			Mayor michael.mayor@ieee.org			5	
	1 Month		6 Months		12 Months		
Size	Member	Non-Member	Member	Non-Member	Member	Non-Member	
1/4 Page	\$50	\$75	\$250	\$450	\$350	\$450	
1/2 Page	\$75	\$100	\$350	\$550	\$650	\$750	
3/4 Page	\$125	\$150	\$550	\$750	\$950	\$1,250	
Full Page	\$150	\$200	\$750	\$950	\$1,250	\$1,450	





IEEE Florida West Coast Section (FWCS) Tampa, Florida

IEEE FWCS P. O. Box 176 Land O' Lakes, FL 34639-9998

December 2025 - Calendar of Events (For more information see "Inside the SunCoast Signal" → Page 1)						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		*FWCS ExCom		*FWCS CS		
		→Page 1		Monthly Meeting		
				->Page 6		
7	8	9	10	11	12	13
	*Signal Inputs Due					
	End of Day					
14	15	16	17	18	19	20
21	22	23	24	25	26	27
			*Christmas Eve	*Christmas		
				Day		
28	29	30	31			
			*New Years Eve			

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