

The SunCoast Signal

Vol. 70, No. 1, January 2024





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

The SunCoast Signa

The Institute of Electrical and Electronics Engineers, Inc.

TABLE OF CONTENTS

♦ Inside the SunCoast Signal	1
PE Corner	
◆ExCom Members	2
PE Corner (Cont'd)	
◆Entrepreneurship Series Webinar	3
♦ Senior Member Interview	4
♦ Senior Member Interview (Cont'd)	5
♦ PES/IAS Update	6
♦ STEM Explorer Fest	7
◆Tampa Bay Engineers Week Banquet	8
◆Engineers Week History	9
SIGNAL Advertisement Rates	
◆IEEE FWCS Contact and Address Space1	10
Calendar of Events	

Next ExCom Meeting Tuesday, January 2nd, 2024 Google Meet Register with vTools https://events.vtools.ieee.org/m/390450

PE Corner

Art Nordlinger, PE, Life Senior Member New Year's Resolutions

Your local IEEE section and its affinity groups offer a number of seminars, tours and other educational opportunities. Some of these allow professional engineers to earn continuing education hours that are required for license renewal. With the wide variety of companies and industries in our area comes a vast pool of expertise in so many areas of engineering. Many of you are experts in your field, and IEEE has opportunities for you to share your expertise. Make a resolution this year to teach a seminar.

You may be aware of the continuing education requirements for PEs. However, you may not be aware that, in general, a course with sufficient technical content to qualify for granting continuing education hours to participants need not be taught by a PE. Section 61G15-22.002 of the Florida Administrative Code defines what educational activity can qualify for credit: "Any qualifying course or activity with a clear purpose and objective which will maintain, improve, or expand the skills and knowledge relevant to the licensee's area of practice." However, a licensee need only take four hours of continuing education in their area of practice. The remaining twelve hours "...may relate to any topic pertinent to the practice of engineering ... " (61G15-22.001(1)). IEEE puts on many educational opportunities that easily meet these requirements.

Continued on Page 2

IEEE FWCS SunCoast Signal

IEEE FWCS

The SunCoast Signal

Vol. 70, No. 1, January 2024

IEEE FWCS ExCom

CHAIR: Michael Mayor, michael.mayor@ieee.org VICE CHAIR: Andrew Seely, andrew.seely@ieee.org SECRETARY: Chung Seop Jeong, PhD, jeong@ieee.org PAST CHAIR: Paul Belussi, paul.belussi.us@ieee.org TREASURER: Claude Pitts, Robert DeMelo trea.fwcs.ieee@gmail.com SIGNAL EDITOR: Michael Mayor, michael.mayor@ieee.org, AWARDS & BYLAWS: Richard Beatie, PE, r.beatie@ieee.org MEMBERSHIP: Hermann Amaya, hermann.amaya.us@ieee.org TEACHER IN-SERVICE: Sean Denny, Venner20@ieee.org, AESS/IMS Aerospace & Electronic Systems/Instrumentation & Measurement, Chair: Michael Mayor, michael.mayor@ieee.org CS Computer Society, Chair: Andrew Seely, andrew.seely@iee.org EMBS Engineering in Medicine & Biology Chapter: Sylvia Thomas, sylvia@usf.edu MTT/AP/ED Microwave Theory & Techniques/Antennas & Propagation/Electron Devices Joint Chapter Dr. Jing Wang, jingw@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 Joint Chapter: Chair Michael Ramalho, PhD, mar42@cornell.edu WIE Women in Engineering Affinity Group: Chair Diana Aristizabal, dianaaristizabal@ieee.org; Ammara Ghani: ammara.ghani@gmail.com LIFE MEMBER Affinity Group: Chair Richard Beatie, PE, r.beatie@ieee.org PACE Chair Michael Mayor, michael.mayor@ieee.org YOUNG PROFESSIONALS: Chair TJ Ross, a.j.ross@ieee.org **CONSULTANTS NETWORK:** Hermann Amaya, hermann.amaya.us@ieee.org CONFERENCES: Josh Grose, jgrose@gmail.com SENIOR MEMBER COMMITTEE: Hermann Amaya, hermann.amaya.us@ieee.org SECTION STUDENT ACTIVITIES CHAIR: Ron Ambrosio, ron.ambrosio@ieee.org **USF STUDENT BRANCH ADVISORS:** Dr. Andrew Hoff, Student Branch Co-Advisor, hoff@usf.edu, Dr. Chung Seop Jeong, Student Branch Co-Advisor, jeong@usf.edu Dr. Robert Karam, CS Chapter Advisor, rkaram@usf.edu Dr. Jing Wang, MTT Chapter Advisor, jingw@usf.edu Student Branch/Chapters: USF Student Branch, Chair: Utkarsh Misra, umisra@usf.edu USF CS Chapter Chair: Mykyta (Nick) Nechaiev, mnechaiev@usf.edu USF Microwave Theory & Techniques, Chapter Chair: Anil Imren, imrena@usf.edu USF HKN Kappa Xi Chapter, President, Roberto Montero, roberto.montero@ieee.org FLORIDA POLYTECHNIC UNIVERSITY Student Chapter Chair, Aedan Casey acasey9788@floridapoly.edu Student Branch Advisor: Muhammad Ullah mullah@floridapoly.edu CS Chapter Chair: Zane Wolfe, zwolfe4232@floridapoly.edu CS Chapter Advisor: Oguzhan Topsakal, otopsakal@floridapoly.edu WEB MASTER: TJ Ross, a.j.ross@ieee.org WEB PAGE: https://r3.ieee.org/fwc/

Continued from Page 1

You may be thinking that your area of expertise is very specific and that it won't qualify for continuing education since it's not many people's "area of practice". For one, area of practice is generally broadly defined. For example, though your area of expertise may be electrical systems used in zero gravity environments, your area of practice can be broadly defined as electrical engineering. Lots of engineers may be able to count a course that you could teach as applicable to their area of practice. And second, even if they can't, they can count it toward the twelve hours they must take in a pertinent engineering topic.

There is an added bonus, in addition to the satisfaction of sharing your expertise with your colleagues, if you are a PE teaching a qualifying seminar. The first time you teach the seminar, you get double the number of continuing education hours that are awarded to the students!

IEEE does a lot in terms of continuing education and with your help, we could do a lot more. Please contact your IEEE officers for more information on how you can share your expertise with your colleagues by teaching an IEEE seminar.

The legwork required to find speakers, schedule seminars and tours, and generally run the IEEE operation falls to a few dedicated individuals. I know that we all appreciate their efforts. You can help by resolving this year to make a small commitment of your time. Please come to an administrative meeting for your affinity group or a section meeting. Your participation, big or small, will greatly help the organization.

THE SUNCOAST SIGNAL, published monthly by the Florida West Coast Section (FWCS) of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). Please Note that the SUNCOAST SIGNAL is sent each month to ACTIVE members of the IEEE Florida West Coast Section. So to continue receiving the SIG-NAL please keep your membership Active, meaning, renew your membership when it becomes due. Annual subscription is included in the IEEE membership dues. The opinions expressed, as well as the technical accuracy of authors, advertisers or speakers published in this newsletter are those of the individual authors, advertisers, and speakers. Therefore, no endorsement by the IEEE, its officers, or its members is made or implied. All material for THE SUNCOAST SIGNAL is due in electronic form by the end of day of the 1st Monday after the 1st Tuesday of the month, i.e. the ExCom meeting, preceding the issue month.

Address all correspondence to: Michael Mayor michael.mayor@ieee.org The SunCoast Signal, Copyright © 2023

IEEE FWCS SunCoast Signal

Page 2 of 10



The SunCoast Signal

Vol. 70, No. 1, January 2024





Florida West Coast Section





Entrepreneurship Series Webinar #4 The Entrepreneurial Journey: Taking the Leap to Success

Date: Friday, January 19, 2024

Free

Time: Webinar: 12:00PM – 1:00PM (EST/EDT)

Speaker: Olu Fagbemiro – Founder, President – Aneden Consulting Inc.

Location: Online – meeting invitation will be emailed to attendees prior to seminar

Cost:

CEH Credits: No CEH's provided for this event.

RSVP: Online at: https://events.vtools.ieee.org/m/384171

Questions: Kayla Allemang, kallemang@ieee.org

Abstract: Embarking on an entrepreneurial journey is an exciting yet challenging endeavor. In this presentation, Olu Fagbemiro will explore the critical phases of starting and running a new business. Before taking the leap into entrepreneurship, thorough preparation is essential. Olu will delve into the key steps to consider before quitting your current job, including:

- Developing a compelling business idea
- Financial planning and budgeting
- Navigating practical steps to setting up a business and running a startup
- Navigating legal requirements
- Building valuable networks

Join Olu Fagbemiro as she embarks on this journey, gaining insights into how to navigate challenges and harness the power of relationships to pave the way for your entrepreneurial success. Whether you're considering taking the plunge or are already on your entrepreneurial path, this presentation will provide valuable guidance and inspiration.

Biography: In 2017, Olu Fagbemiro founded Aneden Consulting, Inc., a certified woman-owned and minority-owned Small Business (WBE/ WBOSB/WBE), an engineering consulting firm providing services to the electric utility and energy industries. Aneden Consulting's primary focus is on accelerating its clients' success

The firm specializes in conducting electric transmission system planning and generation interconnection studies for leading RTOs, public utilities, independent power producers, and renewable energy developers.

Abstract: Embarking on an entrepreneurial journey Olu Fagbemiro has over 19 years of planning expeis an exciting yet challenging endeavor. In this rience, completing numerous transmission planning,



NERC Compliance, load interconnection, generation interconnection, and power system studies. Olu has expertise in managing multiple transmission expansion and generation interconnection studies, computer programming, automation tool develop-

ment, and multiple planning software. Before Aneden Consulting, Olu was a Department Manager for Burns & McDonnell's system planning team in Houston, Texas.

In November 2018, after experiencing fertility struggles while starting her own family, Olu founded Aneden Gives, a non-profit organization that believes that fertility treatments should be accessible to all. Aneden Gives provides financial support to families going through their fertility journey. Aneden Gives offers families hope, building families and fulfilling dreams.

In 2012, Olu earned her MBA in Corporate Finance and Strategy from Emory University Goizueta Business School and her BSc. in Electrical Engineering and PDSc. in Computer Science from the University of Saskatchewan in 2004.

Olu lives in Seattle, WA, with her husband and two young children. She is an avid marathon runner and loves to travel with her family.

IEEE FWCS SunCoast Signal

Engineering Pathways: A Journey with Mr. Aswal - Insights, Achievements, and Advice for Future Engineers by Gary Nicola Interview with Mr. Rajeev Aswal by Gary Nicola Thompson

I started the interview by asking Mr. Aswal if he wouldn't mind being recorded. He asked me what I would be doing with the recording; at the time, I told him that I would be using it to write this very summary. I am thankful to myself of that time; now I have a record of a valuable experience I can look back on and consider as I prepare to look for a job in my field.

I started with the beginning; how did he get where he is today, tied together with how he would describe his professional background. I learned about Mr. Aswal's path and interests through these questions as well. From when he was small, he wanted to be an "engineer". He didn't know what it meant at the time; his understanding was that fixing things is what made an engineer, but that got him on a path he liked regardless. For Mr. Aswal, the competition for his field was intense enough that getting selected was a process that required a year or more of studying.

When he was deciding what to major in, a big factor was the current technological field. The time was around the 1990's-the field was worried about what they called the "Y2K problem." Mr. Aswal explained it to me as the transitions into the 2000's for computers, instead of starting with the last digits of the year -96, 97, 98, 99. The theory was that computers would become obsolete because of this transition, so when given the choice between Computer, Electronics, or an Electrical specialization, Mr. Aswal chose Electronics. This choice was melded with an additional learning field—electronic instrumentation. It was a focus on the control aspect of the electronics, instead of just the communication aspect. This led to his first job in controls.

Learning about the controls sparked Mr. Awal's interest in the machines around him—like his car. He got a chance to expand on this interest with a job offer searching for an engineer for automated robotic parking. Mr. Aswal programmed the entire garage, going on to complete another project that became a Guinness World Record, beating his own record in a later year. He started with his current company, Robotic Parking Systems Inc, in 2006, and has stayed with them ever since, climbing the ranks. As of July 2022, he is their Chief Technology Officer.

As a father, Mr. Aswal compared choosing his most significant accomplishment to asking a father to choose their favorite child. He does not see them as "one was better than the other", instead seeing them as products of their time. At the time, they were what was needed. Each accomplishment built on each other, leading him to the ideas he is working on now. For the automated parking garage, Mr. Aswal started incorporating Electrical Vehicle (EV) charging into the storage system, around 2017, in order to cover the increasing EV market. As he advanced in his career, he gained patents for his work and the improvements to the automated parking system.

I confirmed that Mr. Aswal is an IEEE Senior member, before asking him if IEEE has added any specific value to his career-as an Electrical Engineering student, I have been advised to join IEEE by multiple professors. I used this opportunity with a senior member to gain an insight to the usefulness of IEEE in growing an engineer's career. In response to my question, Mr. Aswal told me that he had recently become a senior member of IEEE; that it opened a different world for him. Being a member allows him access to journals, papers, and, most of all, other engineering peers. He described IEEE as a big community with engineers willing to answer questions, to give you pieces of their time if you need help with something. It is something he detailed as being the most helpful.

As a major member of the automated robotic parking field, Mr. Aswal was able to give me a firm prediction for his field. With confidence, he told me that automated parking will be a big boom in the coming 10 years, with the advantages it brings and the rate of technological advancement. The parking system allows for zero carbon emissions, while being safer in terms of protecting personal items from thieves.

Continued on Page 5

Vol. 70, No. 1, January 2024

Continued from Page 4

Ms. Aswal did not have a mistake in terms of doing a procedure wrong, or forgetting to do something important. He instead had a situation that tied into advice he wanted to give to up-andcoming engineers. Back in 2001, when the attack of 9/11 happened, a lot of companies were laying off workers and not taking new hires. When offered a job, Mr. Aswal took it, despite it not paying much, along with being a job in the sales field, not engineering. It was fine for a few months. Then he realized what he was doing. He asked himself why he was going into a field in which he was teaching people about mobile technologies.

That wasn't what he studied to do; it wasn't the path he wanted to follow. He wanted to do something creative, help develop something. So he left the job. It was one of the best decisions he made. He still regrets having allowed himself to work for three months in the sales field-he knew that if he had been offered something further in the sales field before he realized his mistake, he would have taken it. That tied in greatly to the advice Mr. Aswal wanted to give: there are so many branches that you can fit, but it doesn't mean it is your future. Focus on what you are doing, know exactly what kind of goal you want to go for. See the brighter side of whatever work you are doing. Is what you are doing your passion, or are you compromising on something for things like money or convenience? The doors will open for you once you focus on it.

The SunCoast Signal Vol. 70, No. 1, January 2024

Florida West Coast Section **PES/IAS Update**

BY: ROBERT DEMELO

HAPPY NEW YEAR!

YEAR IN REVIEW - 2023

The 2023 calendar year was very productive for your Florida West Coast Section PES/IAS Joint Chapter. The chapter continues to work hard to provide value to the membership. The summary of 2023 PES/IAS events include the following:

Fourteen (14) - ExCom Planning Meetings

Two (2) – Joint In-Person Technical Tours with Life Members Affinity Group (LMAG)

One (1) Joint In-Person Substation Tour with Women in Engineering (WiE)

Nine (9) - Professional/Technical Seminars

One (1) - Florida Electric Cooperative Association (FECA) Engineers Conference

Total of 27 Events

NEW OFFICERS FOR 2024!

A new year brings new opportunities. As your chair for the past two years, I want to take this opportunity to personally express my sincere appreciation for your continued interest and Membership to the IEEE community! I also want to thank everyone for entrusting me with leading the joint chapter as chair, it has been an incredible journey and time of growth for the chapter. I ask that everyone join me in congratulating and supporting the new officers for 2024: Kayla Allemang - Chair, Ryan Copley - Vice-Chair, and Regan Sink - Secretary. Looking forward to great things in 2024!



IEEE FWCS SunCoast Signal



Saturday, January 20, 10 am - 2 pm **STEM Fest sign-up:** https://forms.office.com/r/1PpyCkhiCW

We are so excited to announce the date for our next STEM Explorer Fest. It will be held on Saturday, January 20, 2024, from 10:00AM to 2:00PM at Largo Central Park, 101 Central Park Dr., Largo, FL 33771. Once Please click the link below to sign up, and again, the STEM Explorer Fest will be combined with the City of Largo's Touch a Truck event, and we will have many presenters joining us.

Looking forward to our next event! Thank you, Charmaine & Cathie **PCS STEM**

Last year's event was very popular! Thank you so much for making this a memorable event for our students. We would love to have you participate in our 2024 festival. don't hesitate to reach out with any questions.

> Catherine Mullins, Ed.D. Secondary STEM Instructional Staff Developer **Pinellas County Schools** (727) 588-6338

IEEE FWCS SunCoast Signal

Page 7 of 10

IEEE FWCS

The SunCoast Signal

Vol. 70, No. 1, January 2024





This premier event brings together local leaders and engineering professionals to recognize the outstanding achievements of Engineers, Science Teachers, Math Teachers, and Students in our community. Additionally, awards will be presented to outstanding engineers, as well as local engineering students excelling in their engineering related studies and Young Professionals. The banquet also features the Lignell Awards. These awards, named after a former Chairman for the Institute of Electrical and Electronics Engineers (IEEE), are given to local High School educators who are performing outstanding work in the instruction of the STEM topics (science, technology, engineering and math). The organizers of the event recognize the important role these individuals play in encouraging students to pursue technological degrees in college.

The banquet is a combination of efforts by all the Engineering Societies of West Central Florida. This event brings together professionals in all fields from all around Tampa and Florida's west coast.

DATE: Thursday, February 22, 2024

TIME: 4:30 - 6:30 PM Networking & Exhibition 6:30 - 9:00 PM Dinner Program & Awards

LOCATION: **BRYAN GLAZER FAMILY** 522 N. Howard Ave Tampa, Florida 33606 **Registration Information coming soon** www.tbewb.org FFF 4511 Tampa Bay ALTRA Florida Florida Engineering Engineering Society Society Tampa Chapter **Pinellas** Chapter

Registration and Information

http://www.tbewb.com/

IEEE FWCS SunCoast Signal

Page 8 of 10

Vol. 70, No. 1, January 2024

Engineers Week

It is the time to celebrate the amazing accomplishments of engineers, technicians, and technologists and to introduce K-12 students to engineering and technology.

Five and a half million students are engaged in engineering every year by individual volunteers and educators, engineering and tech companies, universities, museums, libraries, and community organizations at events and activities throughout the US and around the world.

2024 Theme *Welcome to the Future*

Every September, DiscoverE (the organization that supports and sustains Engineers Week) releases the annual theme, logo, artwork, planning guides, social media graphics, and new engineering activities for use by the education and engineering community to engage students and celebrate engineers.

The 2024 theme, Welcome to the Future, is about celebrating today's achievements and paving the way for a brighter and more diverse future in engineering.

History

The celebration of National Engineers Week was started in 1951 by the National Society of Professional Engineers in conjunction with President George Washington's birthday. President Washington is considered as the nation's first engineer, notably for his survey work. Prior to the start of National Engineers Week, the University of Missouri College of Engineering began celebrating the world's first Engineers' Week in 1903, 48 years before the National Society of Professional Engineers, with St. Patrick as the patron saint of engineers.

The results of the Federal Engineer of the Year Award are announced during the week.

SunCoast Signal Advertising Rates									
	1 Month		6 Months		12 Months				
Size	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			

IEEE FWCS SunCoast Signal

Page 9 of 10

♦ IEEE FWCS

The SunCoast Signal

Vol. 70, No. 1, January 2024

IEEE FWCS P. O. Box 7067 St. Petersburg, FL 33734-7067



Florida West Coast Section Tampa

NON-PROFIT ORG U.S. POSTAGE PAID No. 1197 TAMPA, FL PERMIT

DATE SENSITIVE MATERIAL DO NOT DELAY

Change of address? IEEE Web Contact Update: https://www.ieee.org/membership/index.html Or send address changes including your name, IEEE Member number and all pertinent information to: IEEE, 445 Hoes Lane, P. O. Box 1331, Piscataway, NJ 08855-1331 or call (800) 678-4333 Or Fax your address changes to (732) 562-5445

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		*FWCS ExCom				
		→Page 1				
7	8	9	10	11	12	13
	*Signal Inputs Due					
	End of Day					
14	15	16	17	18	19	20
					*Webinar #4	*STEM Explore
					→Page 3	→Page 4
21	22	23	24	25	26	27
28	29	30				

IEEE FWCS SunCoast Signal

Page 10 of 10