



Advancing Technology for Humanity

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.

TABLE OF CONTENTS

| ♦ Inside the SunCoast Signal 1 |
|---|
| PE Corner |
| ◆ExCom Members |
| PE Corner (Cont'd) |
| ♦ CLAUDE VERNON PITTS, III 3 |
| ♦ USF Power & Energy Society 7 |
| ♦ USF Power (Cont'd) |
| ♦USF Power (Cont'd) |
| ◆Data4 By Certus Core Conference |
| ♦ STEM Explorer Festival Event |
| ♦STEM Explorer (Cont'd) |
| ♦STEM Explorer (Cont'd) |
| ◆SPC BEAM |
| New Mailing Address |
| ◆Grid Architecture |
| ◆GE/ITI Clearwater Instrument |
| |
| Drone and AI Applications |
| ◆Tech Horizons Summit 2025 |
| ♦ Lignell Awards19 |
| ♦ Drone Swarms |
| Careers in Technology |
| ♦ Upcoming Events21 |
| RAS Southeast Con Planning Meeting |
| FWCS Computer Society Monthly Meeting |
| FWCS PES/IAS ExCom |
| SunCoast Signal Advertising Rates |
| ♦ IEEE FWCS Contact and Address Space 22 |
| Calendar of Events |

Next ExCom Meeting Tuesday, March 4, 2025 Google Meet Register with vTools

https://events.vtools.ieee.org/m/467884

PE Corner Art Nordlinger, PE, Life Senior Member FEMC Funding

The Florida Engineers Management Corporation provides administrative, investigative, and prosecutorial services to the Florida Board of Professional Engineers. I am a member of the FEMC Board of Directors and I have written about FEM-C's purpose and operations in past columns. FEMC operates through a contract with the Florida Department of Business and Professional Regulation, who also provides all of FEMC's funding.

Several months ago FEMC submitted a funding proposal to the DBPR. Here are a few relevant excerpts from the proposal.

Over the past 25 years, the Florida Engineering Management Corporation has diligently served the engineering community and the people of Florida, ensuring the highest standards of professional engineering licensure and ethics. However, we find ourselves at a critical juncture that requires immediate attention: our funding.

Since its establishment in 1998, FEMC's annual funding has remained \$2.07 million. During that time, the landscape of professional engineering in Florida has evolved significantly. The number of licensed Professional Engineers under FEMC's purview has surged to approximately 46,500 — an 86-percent increase since 1998 — with no corresponding increase in our funding.

Of course, the cost of just about everything has increased over the past 27 years. However, FEMC has managed to "do more with less" up to now; a remarkable track record by any measure.

Continued on Page 2



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
TREASURER: Robert DeMelo, robert.demelo@ieee.org
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: Antra Malhotra, antra.malhotra@ieee.org

Vice Chair: Rajeev Arora, rajeevarora@ieee.org 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 Joint Chapter 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

PACE Chair Dr. Jim Anderson. jim.anderson@ieee.org

YOUNG PROFESSIONALS: Chair TJ Ross, a.j.ross@ieee.org

CONSULTANTS NETWORK: Hermann Amaya,

hermann.amaya.us@ieee.org

CONFERENCES: Leandro Maciel, Leandro.maciel@ieee.org SENIOR MEMBER COMMITTEE: Hermann Amaya,

hermann.amaya.us@ieee.org

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 - Caterina (Cat) Capuozzo, ccapuozzo@usf.edu.

CS Anzhelika Kurnikova, akurnikova@usf.edu

PES Nicole Ouellette, ouelletten@usf.edu

HKN - Roberto Montero, roberto.montero@ieee.org

Florida Polytechnic University Chairs

Student Branch, Pedro Seixas,

pseixas1948@floridapoly.edu

CS Zane Wolfe, zwolfe4232@floridapoly.edu

PES Raymond Walker, rwalker4531@floridapoly.edu

RAS - Sahil Talwalkar, tsahil@outlook.com

HKN - Anthony Parrinello, aparrinello1386@floridapoly.edu

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

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

PE Corner - Cont'd from Page 2

You may have thought, as I did at one time, that FEMC's funding is tied to the number of license renewals and the funds generated therefrom. In fact, the funding is fixed and unrelated to the number of licensees that FEMC serves.

FEMC's proposal to the DBPR requests a modest amount of additional funding to continue to provide the excellent level of service that they always have. Unfortunately, the DBPR appears to be disinclined to provide that additional funding. The only alternative for FEMC to obtain needed additional funding is to lobby the Florida Legislature. However, as a quasi-state agency, FEMC is prohibited from lobbying the Legislature directly.

This is where your help is needed. I am requesting that you make your legislators in the State House and Senate aware of this reasonable request. Ask them to sponsor, or at least support, a bill to provide additional funds to FEMC so that they can continue to provide the excellent level of service that they have for 27 years to the engineering community and the people of Florida. If you would like a copy of the original funding proposal, you may contact me or the FBPE office.

Thank you for your consideration and for supporting the engineering community.

New Mailing Address!!!

IEEE Florida West Coast Section P.O. Box 176 Land O' Lakes, FL 34639-9998 See page 14

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 SIGNAL 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.

Contact: michael.mayor@ieee.org The SunCoast Signal, Copyright © 2024



Celebrating the life of

Claude Pitts



A celebration of life with a Masonic Service, tributes and reception.

Saturday, St Pete Lodge #139

February 8th, 2025 (formerly Northside Lodge #283)

11am - 3pm 3325 1st St NE

Service at 11:30 St Petersburg, FL 33704

RSVP to Rebecca Pitts at RememberingClaude@gmail.com Questions, photos, and memories can be sent to this email as well



In Loving Memory of Claude V. Pitts, III



A dedicated leader, visionary, friend, and mentor within the IEEE community.

As IEEE Region 3 Life Members Coordinator, IEEE Florida Council Chair, IEEE Region 3 Area Chair, and IEEE Florida Westcoast Chair, Claude's unwavering commitment, leadership, and passion for advancing science and technology profoundly impacted the IEEE Florida community and beyond.

His legacy of service, innovation, and fellowship will continue to inspire generations of engineers and technologists.

With heartfelt gratitude for his contributions and in recognition of a life devoted to excellence and service, the IEEE Florida Council honors Claude's memory and extends its deepest sympathies to his beloved family.

May God grant him eternal rest, and may his soul find peace. Godspeed, Claude.

Presented to his wife and family by the IEEE Florida Council - February 2025

OBITUARY

Claude Vernon Pitts III

Claude Vernon Pitts III, age 61, passed away peacefully on January 21, 2025, surrounded by his loved ones. He leaves behind a profound legacy of hard work, dedication, and unwavering love for his family.

Claude was born in March 1963 in St. Petersburg, FL, to Claude Vernon Pitts Jr and Nancy Marshall. He was a proud member of the Saint Petersburg High School Class of 1981.

Claude's greatest pride was always his family. He was fortunate to spend 43 years—40 of them married—with his soulmate, Katherine. Together, they built a life filled with love, laughter, and mutual respect. Claude was deeply proud of his three children: son Phillip Pitts, son Stephen Pitts (with daughter-in-law Kimberly), and daughter Rebecca Pitts (with son-in-law Jonathon). The light of his life this last year was his cherished grandson, Walker. Claude is also survived by his brothers, Siak-Ling K. Pitts and Gim Seong Koay, and their families.

Claude's career spanned over 40 years in utility operations and application engineering with subject matter expertise in numerous areas including: power system protection and control (P&C), distributed energy resources (DER), microgrids, substation engineering and advanced relay controls, systems reliability and automation, and SCADA systems and advanced applications. He was a Certified Project Management Professional (PMP). Claude played a prominent role in multiple professional organizations throughout his career. He served as Chief Steward for the International Brotherhood of Electrical Workers (IBEW) from 1992 to 1998. As a dedicated member of the Institute of Electrical and Electronics Engineers (IEEE), he held several leadership positions, including Region 3 Life Members Coordinator, Florida Council Chair, Region 3 Area Chair, Florida West Coast Section (FWCS) Chair, FWCS Vice Chair, and FWCS Treasurer. He was also Chair of the IEEE Power and Energy Society.

Throughout his career, Claude's exemplary work was honored with numerous awards and recognitions. IEEE honored him with the PES Outstanding Engineer Award, the Outstanding and Distinguished

Claude Vernon Pitts III, age 61, passed away Career with IEEE Award, and the Significant Contriully on January 21, 2025, surrounded by his bution Through the Year Award.

> Outside of his professional life, Claude was passionate about the Masonic Brotherhood, where he was a Mason for nearly 39 years. He became a Master Mason in 1986, served as Master of Northside Lodge #283 F&AM in 1991, and continued as Lodge Secretary for the last 29 years. Claude's involvement with the Masonic brotherhood extended through multiple organizations related to the fraternity including being a Chevalier of the International Supreme Council of the Order of DeMolay, a life member of the Egypt Temple Shriners, a perpetual member of Southern Jurisdiction of the Scottish Rite of Freemasonry, a life member of the Sunshine Commandery No 20 Knights Templar of the York Rite, and Charter Member of the Florida Masonic Home High Twelve Club #702.

> Claude was a man who held integrity and honesty in the highest regard. His commitment to his pursuits were unwaveringly driven by passion and diligence rather than the need for recognition. The wisdom he imparted, the guidance he offered, and the friendship he shared will be profoundly missed by all. His memory will undoubtedly endure in the hearts and minds of all who had the honor and privilege of knowing him.

A celebration of Claude's life will be held on February 8, 2025, at 11:00 a.m. at the St. Pete Lodge #139 (formerly Northside Lodge #283), located at 3325 1st St NE, St. Petersburg, FL. Masonic Service, open to all, begins at 11:30 a.m.

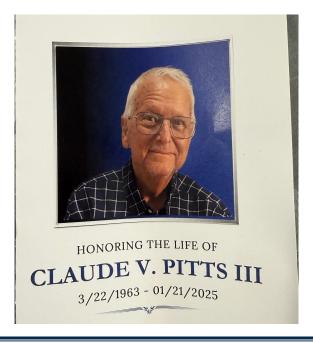
In lieu of flowers, the family asks that donations be made to the charity being set up to honor Claude. Link coming soon.

Eric S. Ackerman, Ph.D.





Claude and his Wife Katherine



Claude's Sons Stephen and Phillip and Daughter Rebecca



USF IEEE Power & Energy Society Hosts Successful Power and Energy Forum

The SunCoast Signal

On Monday, February 3rd, the University of South Florida (USF) chapter of the IEEE Power & Energy Society (PES) hosted Power and Energy Forum in the Marshall Student Center (MSC) Ballroom. The event provided a valuable platform for students to engage with industry professionals, explore career opportunities, and learn about advancements in the power and energy sector.

The forum welcomed 12 companies and approximately 23 company representatives, including industry leaders such as Seminole Electric Cooperative, NextEra Energy, QTIB Engineers, Qualus, LineWorks Engineering, Sargent & Lundy, Schweitzer Engineering Laboratories, Moss & Associates, Duke Energy, GE Vernova, Withlacoochee River Electric Cooperative, and Quanta Technology. A total of 134 students registered for the event, with 93 attending throughout the day to network, attend presentations, and explore research opportunities.

Expert Insights and Industry Trends

The event featured several distinguished speakers, beginning with Dr. Lingling Fan, who presented on behalf of herself, Dr. Zhixin Miao, and Dr. Rabi Kar. Dr. Fan discussed current industry trends, advancements within USF's power track and labs, past IEEE PES activities, and notable alumni success stories. Her insights provided students with a comprehensive overview of the evolving Energy, Power, and Sustainability Track at USF.

Following Dr. Fan's presentation, Dr. Ratik Mittal shared his experiences as both a Ph.D. student and instructor within USF's Energy, Power, and Sustainability Track. He highlighted how his academic background prepared him for his current role at Quanta Technology, emphasizing the practical applications of his research and teaching in the industry.

Company Introductions and Networking Opportunities

Vice Chair Alex Lee led the company introductions segment, during which he either provided a brief overview of each company or invited representatives to speak directly to the audience. This session allowed students to gain insight into potential employers and the types of projects these companies undertake. Afterward, students had the opportunity to network with company representatives while enjoying lunch.

Keynote Presentation by Michael Wright, PE

A highlight of the event was the keynote presentation by Michael Wright, PE, Chief Development Officer at Qualus. His talk provided a broad overview of power systems, covering the connectivity from generation to transmission and distribution. He discussed various forms of generation, substation layouts, and the technical drawings used in system design. Additionally, he shared insights into career paths within the power industry, including salary expectations, and recounted his personal journey from graduation to founding his own engineering firm and ultimately achieving his current leadership position. His engaging presentation sparked interactive discussions, with students eagerly asking questions and gaining valuable industry knowledge.

IEEE PES Scholarship Plus Initiative Award Presentation

During the event, Alex Lee and Dr. Fan presented an IEEE Power & Energy Society Scholarship Plus Initiative award to USF IEEE PES Chair, Nicole Ouellette. This prestigious award recognizes students who demonstrate academic excellence and a strong commitment to the power and energy industry.

Closing Remarks and Acknowledgments

The forum concluded with additional networking sessions and research poster presentations featuring work by USF students. The event ran smoothly from 10:30 AM to 3:30 PM, providing attendees with ample time to engage with industry professionals and explore future career paths.

The USF IEEE PES chapter extends its gratitude to the event sponsors: Seminole Electric Cooperative, NextEra Energy, QTIB Engineers, and Qualus. Special thanks also go to Kayla Allemang from Seminole Electric Cooperative for her instrumental role in connecting USF IEEE PES with these companies and helping make the event a success.

With strong student participation and valuable industry engagement, the Power and Energy Forum continues to serve as a cornerstone event for USF's power engineering community.

The chapter looks forward to hosting future forums that provide students with even more opportunities to connect, learn, and grow within the power and energy sector.

Thank you, Nicole Ouellette (she/her)

IEEE USF PES Chair
Tau Beta Pi FL Gamma
IEEE HKN Kappa Xi
USF College of Engineering
ouelletten@usf.edu | LinkedIn



















IEEE Computer Society Florida West Coast Chapter collaborates with Certus Core to present



At Data4, tech leaders and innovators across industries will come together for conversations on today's critical challenges, connections, and networking.

For registration visit: https://www.data4con.com/purchase-tickets

Date: February 26th, 2025 Venue: Embarc Collective

802 E Whiting St, Tampa, FL 33602)

Seats are limited.
Light breakfast, lunch, happy hour, and door prices

are all included in the ticket price.

We hope to see you there!

Welcome!

IEEE Florida West Coast Section



Location: 25

Number of Tables: 2

STEM EXPLORER FESTIVAL EVENT January 18, 2025 LARGO CENTRAL PARK

Article by Sean Denny (STEM Champion/RAS Chair), Vivek Ghulaxe (IEEE Member) and Emma Alaba (RoboFest Chair and RAS Photographer)

After bestowing the title of STEM Ambassador, the IEEE elevated my appointment as STEM Champion. The Florida West Coast Section Executive Committee (EXCOM) members supported my efforts and posted in the Signal Newsletter. I did the first Energy Event on September 1, 2022 with Dr. Sidney Martin and FWCS PES IAS Society.

Through the power of communication, it caught the attention of Dr. Catherine Mullins, Pinellas County Schools STEM Director for the Second event: STEM Explorer Fest at Largo Central Park on January 2023 and in 2024. We returned for STEM Explorer Fest on January 18, 2025.

We announced it through V-Tools and the Signal Newsletter to invite those who wished to participate. The FWCS Treasurer Robert DeMelo loaned me the IEEE FWCS Table cloth.

I arrived at 8 am to the Largo Cultural Center. I checked in and greeted Dr. Catherine Mullins at the Performing Arts Portico. Two tables and four chairs were ready for us. I laid out the IEEE table cloth and displayed extra back issues of IEEE Spectrum Magazine. I also greeted teachers whom I had worked before with Robotics and Teacher In Service including Dan Kinzer, Chad Mairn and Dr. Sidney Martin.

The STEM Explorer Fest ran from 10am to 2pm. I shared the IEEE Booth with RoboFest Chair Emma Alaba, Roxanne Reznor, and Vivek Ghulaxe who volunteered during the festival. Emma Alaba invited our young guests to draw a robot. She distributed left-over 2017 World Championship RoboFest shirts.

I talked about why the IEEE is the biggest Professional International Organization, why we support computer networking standards and STEM education through the TryEngineering.org Website.

Regardless of whether or not a Student, Teacher, or Parent stopped by our booth, I was able to explain the advantages of searching the newly improved TryEngineering.com Website. I remember there were about 20 lesson plans in 2005 including Ohm's Law, Motor Controllers, and Building Robot Arms, now there are a couple thousand. Volunteers can subscribe to get email updates and post their surveys or events. The Florida West Coast Section and Region 3 have accomplished a lot for STEM. We collectively recruited for the FWCS & RoboFest while doing TryEngineering demonstrations promoting Science Technology Engineering and Mathematics for Tampa Bay Education. Dr. Mullins stated how TryEngineering.org is her "Go To" #1 Resource for STEM related activities.







I talked about why the IEEE is the biggest Professional International Organization, why we sup-Ringling College of Art + Design, Code Wiz, and port computer networking standards and STEM edu- Azalea Middle School Robotics. All expressed an cation through the TryEngineering.org Website.

Regardless of whether or not a Student, Teacher, or Parent stopped by our booth, I was able to explain the advantages of searching the newly im- St Pete College Booth. Dr. Sidney Martin controlled proved TryEngineering.com Website. I remember a realistic Robot Dog from a tablet. It danced in the there were about 20 lesson plans in 2005 including field with the children and real dogs. It sat on hind Ohm's Law, Motor Controllers, and Building Robot legs and did a "fist bump" trick. Dr. Martin told Arms, now there are a couple thousand. Volunteers Roxanne the US Military was very interested. can subscribe to get email updates and post their surveys or events. The Florida West Coast Section and Region 3 have accomplished a lot for STEM.

RoboFest while doing TryEngineering demonstra- we had a delightful time. tions promoting Science Technology Engineering and Mathematics for Tampa Bay Education. Mullins stated how TryEngineering.org is her "Go To" #1 Resource for STEM related activities.

I met an IEEE Virtual Reality teacher at the interest in Promoting Robotics & Automation with STEM activities.

A marquee moment, were the robots from the

A police helicopter landed in the northeast parking lot. I picked up my new T-shirt as I was leaving at 2pm. We got a SAVE THE DATE Post-We collectively recruited for the FWCS & card next year's event is January 17, 2026; therefore









This made the day worth our efforts

Sean P Denny venner20@ieee.org

IEEE Senior Member
Teacher In Service, R3 Florida West Coast
Section
Chair/Secretary, IEEE FWCS Robotics
and Automation





FWCS 2025 SPC BEAM EVENT

The Clearwater campus students and staff are excited to invite you to join us at the 2025 SPC BEAM into Your Future Career Event.

Saint Petersburg College, CC Building, 2465 Drew Street, Clearwater, FL 33765

Date: Tuesday, March 11, 2025

Time: 8:30 am - 1:00 pm

As part of SPC's BEAM program, which has garnered tremendous enthusiasm from students and educators alike, your participation will be instrumental in shaping the future careers of our attendees.

Registration:

https://web.spcollege.edu/survey/36833

- ♦ Discovery Zone
- ♦ Industry Presentations
- **♦** Demonstrations
- ♦ Other

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. We invite you to share your company's story and the unique career opportunities you offer.

Your participation will not only provide valuable insights but also encourage younger students to envision a future with your organization.

Event Audience:

- ♦ 800+ Middle and High School students from Pinellas County
- ♦ SPC Students
- ♦ SPC Alumni
- ♦ Community members
- ♦ P.C. Home Schools

Please feel free to forward this invitation to other members of your organization who might be interested in participating.

Please contact Brenda Thompson:

Thompson.brendaj@spcollege.edu for more details.

My phone number is 270-227-8272 should you need to reach me.

Sidney Martin, Ed. D., PE, PMP Program Director (He/Him/His) Engineering, Manufacturing, and Building Arts St. Petersburg College http://martin.sidney@spcollege.edu 727-394-6203

Co-sponsored by: Sean Denny, STEM Champion

NEW MAILING ADDRESS - Cont'd from Page 2

IEEE FWCS has established a new mailing address to better serve our members' administrative needs. Please update

IEEE Florida West Coast Section P.O. Box 176 Land O' Lakes, FL 34639-9998

This change ensures that all correspondence, payments, scholarships, awards, and inquiries are processed more efficiently and securely. Kindly direct any future communications or mailed materials to this address. If you have any questions regarding this update, feel free to contact Robert DeMelo at:

Robert.demelo@ieee.org.







Grid Architecture: A Tool for Achieving a Decarbonized, Decentralized, and Democratized Grid

Date: Friday, March 28, 2025

Time: 12:00PM – 1:00PM (EST/EDT)

Speaker: Ron Ambrosio, IEEE Senior Member & Chair Emeritus,

GridWise Architecture Council

Location: Virtual: Google Meet – Link to be sent to registrants prior to event

Cost: Free

CEH Credits: One (1) CEH

RSVP: Online at: https://events.vtools.ieee.org/m/467883

Questions: Kayla Allemang - Kallemang@ieee.org

Abstract: What is Grid Architecture? Why is it important? How do we use it to define and manage the transformation of our electricity system to achieve the 3-D's goals of a Decarbonized, Decentralized, and Democratized Grid? The GridWise® Architecture Council (GWAC), a group convened by the U.S. Dept. of Energy, is helping define Grid Architecture and educate stakeholders about how it can be used to identify requirements and plan for the changes needed in our electricity systems to meet the evolving objectives of a 3-D's Future Grid.

This talk will provide a brief overview of Grid Architecture as a methodology and tool, introduce the 3-D's objectives, and review other GridWise Architecture Council work that is relevant to the discussion.

Ron Ambrosio is senior technical executive and soft-



ware architect with a focus on technology, business and policy issues related to energy transformation in the electricity industry. He has 40 years of software engineering experience in distributed embedded systems and their integration with enterprise computing

environments (IoT), and 20 years of experience specifically in the energy transformation space.

Ron is co-Founder and retired Chief Scientist of Utopus Insights, Inc., a company that specializes in advanced utility analytics for renewable generation, asset health, forecasting, and Distributed Energy Resource (DER) integration and optimized orchestration for many business and operational applications such as peak reduction, voltage support, unplanned event mitigation and many more. Prior to founding Utopus Insights, was a Distinguished Engineer and Chief Technology Officer for Smarter Energy Research at the IBM T.J. Watson Research Center.

Ron began working with the U.S. Department of Energy (DoE) in 2000 on the planning, collaboration and workshops that led to the creation of the DoE GridWise initiative in late 2002, and later on the planning and launch of the GridWise Alliance industry consortium in 2003. Selected in 2004 to sit on the 13-member DoE GridWise Architecture Council; served as Chairman of the Council in 2009 and 2010, and continues as a member.







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 - Kallemang@ieee.org

Nicole Ouelette - ouelletten@usf.edu

Raymond Walker - rwalker 4531@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







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

Kayla Allemang - Kallemang@ieee.org, Regan Sink - rjsink@ieee.org **Questions:**

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 automati- Sacha Fontaine, P.E. is a leader in the power, utilities, and zation of asset and deficiency detection with comput-renewables sector with over two decades of industryer vision strategies that improve accuracy and reduce forming experience. As Head of Utility AI Strategy at the development time. Deployment of these strategies renowned SAS Institute, Sacha is passionate about develcan be performed in real-time while in flight or in oping and delivering innovative AI solutions that tackle the batch-processing. The mapping of results onto a GIS- complex challenges faced by utilities. Sacha brings a enabled map with matches to utility asset IDs is in its wealth of diverse perspectives and experiences from his final stages. Demonstration videos will be shown.

This seminar explores the role of drones and artificial 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.

> previous roles at industry giants like Duke Energy, GE, and Siemens.



Tech Horizon Summit 2025 Saturday, April 12, 2025 11:00 AM to 5:00 PM

Get ready for an incredible day of innovation at the **Tech Horizon Summit 2025**, organized by the IEEE Computer Society at Florida West Coast Section, IEEE-CS Student Branch Chapters at USF, and PolyTech, who previously organized the 1st TechX in the United States and Canada. A free, vibrant big event, brings together the future of Emerging Technology from Region 3! Enjoy complimentary food, network with passionate innovators and start-ups, and hear from talented speakers. Location will display when you register.

Register here: https://bullsconnect.usf.edu/ieeecs/rsvp_boot?id=1976546



Lignell Awards - 2025

Outstanding Teacher Recognition Program

For some years now the IEEE Florida West Coast Section (FWCS) has sponsored the Lignell Award Outstanding Teacher Recognition Program to recognize and honor outstanding contributions by Public High School teachers to pre-college education in Mathematics and/or Science pre-college education in Charlotte, Citrus, DeSoto, Hardee, Hernando, Hillsborough, Lee, Manatee, Pasco, Pinellas, Polk, and Sarasota Counties.

This program is open to all individuals teaching classes in Mathematics and/or Science in the public high schools during the current school year. Awards will be presented at the Tampa Bay Engineers Week Banquet 2025

Carissa Deneca's love for mathematics began as



a student in Hillsborough County Public Schools, and she's been teaching in the district for 18 years, with the last 9 at Gaither High School. A 2007 graduate of USF with a degree in Mathematics, she currently teaches AP Statistics and Algebra 2. Over the years, Carissa has worked with students of all levels, from those facing the biggest challenges to some of the brightest minds. She believes in teaching each student in a way that connects to their unique strengths, encouraging them to explore patterns and use strategies that work best for them.

Marie Puskas, M.Ed, is the mathematics depart-



ment chair and Advanced Placement Statistics teacher at Steinbrenner High School where she was voted Teacher of the Year in 2015 and 2020. In addition to Mathematics Instruction, Marie has been a Teacher Talent Developer – focusing on differentiating instruction for all

learners, increasing classroom engagement, coaching teachers, and providing tailored on-campus professional development. Marie was one of five teachers selected statewide by Impact Florida for the MathVoice cadre. This cadre created a unit for middle school mathematics that integrates statistical benchmarks with Youth Participatory Evaluation tools to conduct research and analyze data on students' individual and shared experience in mathematics classrooms. Alongside the teacher, students use this research to propose informed, data-driven recommendations to improve student experiences.

Drone Swarms Date: 27 Mar 2025 . 06:00 PM to 07:00 PM

Time: 06:00 PM to 07:00 PM

No Fee, Virtual link will be provided one day before the meeting

Register here:

https://events.vtools.ieee.org/m/467681

By now just about everyone is familiar with drones. No matter if you have seen YouTube videos of people filming events, racing them, flying over New York / New Jersey or from the war in Ukraine it seems like drones are in the news almost every day. In fact, you might even own one of these yourself.

There is no doubt that a drone has become a valuable tool for doing a number of things such as inspecting power lines, following whales, making movies, etc. However, what comes next? Where do we go from here? It turns out that being able to control a single drone and have it fly to a location and perhaps do something is very valuable. However, what would you do if you wanted to take a lot of something to a location or do something there over and over again? Yes, you could fly your drone there, do it, fly it back, outfit it again, then rinse and repeat; however, the time and effort involved in doing this would potentially be prohibitive. There has to be a better way...

It turns out that there might be a better way: swarms. You and I already know about swarms. How many times in the Fall have we looked up into the sky and seen massive groups of birds following each other as they swoop and migrate? It turns out that fish do the same thing. Since swarming already exists in nature, perhaps we can learn something from the creatures that already do this and apply it to not only drones but to robotics in general. What would that look like?

Good news: you have an opportunity to find out. In this presentation we're going to be taking a look at the cutting edge research that is going into finding out how swarms work in nature with the plan to take this knowledge and apply it to robotics and drones. In the not too distant future you might look up and see a swarm of drones heading off to look for a lost child, inspect a failing dam, or deliver needed supplies. How that's going to happen is what we'll be talking about...

Join us by registering to attend this event and we'll see you there!

Careers in Technology Spring Series 2025 – Elizabeth Alves March 4 @ 8:00 pm - 9:00 pm

Elizabeth Alves STEM Affiliate Leader at Learning Disabilities Association of America Elizabeth Alves will share her preparation for her mission and a deep dive of her endeavors, projects, programs, accomplishments and inspired goals as a passionate Humanitarian with over 20 years of experience in education, specializing in integrating STEM concepts for students of all abilities. Her expertise spans general and special education, with a focus on supporting neuro-diverse learners and the under.

https://events.vtools.ieee.org/m/456329

| Florida West Coast Section - Upcoming Events Summary - Year 2025 | | | | | | |
|--|------------------------|--|---|----------------------|--|--|
| Date / Location/Time | Organization | Description Website | | Contact email | | |
| May 19-22 | IEEE FWCS | Fog and Mobile Edge Computing | P | Muhammad Al-Abdullah | | |
| University of Tampa | Computer Society | https://emergingtechnet.org/FMEC2025/ | | mal-abdullah@usf.edu | | |
| | IEEE FWCS | Modern Computing Networking and Applications | P | | | |
| | Computer Society | https://mcna-conference.org/2025 | | | | |
| | IEEE FWCS | Intelligent Cybersecurity Conference | P | | | |
| | Computer Society | https://icsc-conference.org/2025 | | | | |
| May 26-30 | IEEE Biometrics | IEEE 19th International Conference on | P | Shaun Canavan | | |
| Tampa / Clearwater | Council | Automatic Face and Gesture Recognition | | scanavan@usf.edu | | |
| | Computer Society | https://ieee-biometrics.org/conferences/flagship/fg/ | | | | |
| Attendance: V: Virtual P: In Person - V & P: Virtual and In Person | | | | | | |

RAS Southeast Con Project Meetings

Florida Polytechnic University

March 12 @ 4:00 PM - 5:30 PM

Room: BARC-1123, Bldg: Barnett Applied Research Center, 4700 Polytechnic Circle, Lakeland, Florida, United States, 33805

https://events.vtools.ieee.org/m/467554

FWCS Computer Society Monthly Meeting VIRTUAL

March 6, 2025, 6:30 pm - 7:30 pm

https://events.vtools.ieee.org/m/467479

FWCS PES/IAS ExCom Meeting March 6, 2025, 6:30 pm - 7:30 pm In Person

215 N Dale Mabry Hwy, Tampa, Florida, United States, 33609 https://events.vtools.ieee.org/m/450354

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



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

| March 2025 - | Calendar of Ev | ents <i>(For more l</i> | information see | "Inside the Su | nCoast Signal" | \rightarrow Page 1) |
|--------------|--------------------|-------------------------|-----------------|----------------|--------------------|-----------------------|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| | | | | | | 1 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | *FWCS ExCom | | *FWCS CS | | |
| | | →Page 1 | | Monthly Meting | | |
| | | *Careers in | | ->Page 21 | | |
| | | Technology | | | | |
| | | ->Page 21 | | | | |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| | *Signal Inputs Due | *SPC BEAM | *RAS Southeast | | | |
| | End of Day | ->Page 14 | Con Meeting | | | |
| | | | ->Page 21 | | | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| | | | | *Drone Swarms | *Grid Architecture | *FWCS PES/IAS |
| | | | | -> Page 17 | -> Page 15 | ExCom |
| | | | | | | ->Page 21 |
| 30 | 31 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |