Florida West Coast Section Serving ALL Members in the Following Counties (Blue): Charlotte, Citrus, DeSoto, Hardee, Hernando, Hillsborough, Lee, Manatee, Pasco, Pinellas, Polk and Sarasota

Also, serving SOME Members only (depending on ZIP code) in the following Counties (Yellow): Collier, Hendry, Highlands, Levy and Marion

This Newsletter is Now **DISTRIBUTED ELECTRONICALLY** There is NO Print Edition Also, it can be downloaded from the FWCS website: https://r3.ieee.org/fwc/newsletter-archive/

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Next ExCom Meeting
Tuesday, July 1st, 2025
Google Meet
Register with vTools
https://events.vtools.ieee.org/m/488880

Art Nordlinger, PE, Life Senior Member
FBPE Update

A few months ago I reported that the Florida Engineers Management Corporation, who provides administrative, investigative, and prosecutorial services to the Florida Board of Professional Engineers, requested a modest increase to their annual funding. This funding is provided by the Florida Department of Business and Professional Regulation. After receiving a less-than-positive response from DBPR, FEMC, who can't directly lobby the Legislature, requested various interested parties to do so on its behalf. To date, the Legislature has yet to pass a budget. However, the good news is that the current budget proposal does contain additional funding for FEMC. We can only hope that this item survives through the final budget approval process.

Additionally on the legislative front, there is one bill of concern to the engineering community, and all other licensed professions governed by the Florida Department of Business and Professional Regulation. Senate Bill 110 proposes to eliminate all regulatory boards that are under DBPR and place those responsibilities with DBPR staff directly. This includes eliminating both the Florida Board of Professional Engineers and the overseeing Florida Engineering Management Corporation (on whose board I sit). The bill, thankfully, didn't gain much traction and is now reported to be dead for this year. As you might imagine, every professional association and other affected entities were lobbying to kill this bill.

IEEE FWCS ExCom Members

CHAIR: Michael Mayor, michael.mayor@ieee.org
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  Sylvia Thomas, sylvia@usf.edu
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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:
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    CS Anzhelika Kurnikova, akurnikova@usf.edu
    EDS, Luis Quevedo, lquevedo@ieee.org
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    HKN - Will Caroll, wcarroll4993@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

Though the licensure renewal period ended on February 28, engineers are still renewing their licenses. As I mentioned in a previous column, it seems that many engineers waited until the last minute to renew and then were surprised that the continuing education reporting process had changed. FEMC and the FBPE hope that future renewals run smoother now that everyone has gone through the new reporting process.

◈IEEE Florida West Coast Section	Consultants Network	IEEE PES Power & Energy Society	AESS IEEE Aerospace and Electronics Systems Society	WIE IEEE Women in Engineering Women in Engineering	IEEE Life members

ORGANIZER: AMHERCORP -- Hermann Amaya – hamaya@amhercorp.com

GENERATIVE ARTIFICIAL INTELLIGENCE (GenAI

Date:	**Friday, July 18, 2025**
Time:	**5:00 PM – 8:00 PM (EDT)**
Speaker:	**Guy Perry SMIEEE, PE, CEO BluOcean AI**
Location:	**Saint Petersburg Yacht Club, 11 Central Ave, St. Petersburg, FL 33701**
Cost:	**Admission $60 - Students $25, Includes Pizza Dinner and Parking at the Yacht Club.**
CEH:	**3 CEHs included in the Admission, Certificate available by selecting Yes at registration.**
RSVP:	**Online at: https://events.vtools.ieee.org/m/488293**
Questions:	**Hermann Amaya, Chair CNAG hermann.amaya.us@ieee.org**
	Guy Perry, Vice Chair CNAG guy.perry@bluocean.ai

Abstract: Generative AI (GenAI) is a type of artificial intelligence that focuses on creating new data, like text, images, videos, or audio, based on existing data. It works by learning patterns from large datasets and then generating novel content that resembles the learned patterns. Think of it as an AI "artist" that can create something new based on examples it has seen.

Foundations & Overview

1. The AI Landscape & Introduction to Generative AI Agents
2. Anatomy of a GenAI Agent: Components & Architecture
3. Core Technologies: LLMs, Embeddings & Retrieval
4. Agent Workflows: Prompting, Chaining & Memory
5. Business Use-Case Survey: Operations
6. Live Demo: AI Agents in Action

Guy Perry SMIEEE, PE, CEO BluOcean AI, split my time between building BluOcean.ai—a Generative AI Agent Platform for business excellence—and advising Fortune 500 clients as a Principal Consultant.

Over 30 years, I've optimized operations and led supply-chain transformations across Manufacturing, Financial Services, Healthcare and beyond. Today, I unite my product-company insights with hands-on consulting to deliver measurable ROI.

I split my time between building BluOcean.ai Generative AI Agent Platform for business excellence—and advising Fortune 500 clients as a Principal Consultant.

What I Do

Co-Founder @ BluOcean.ai

- Defined & launched GenAI Agents powering real-time decision-making in Maintenance, Operations, Supply Chain, and Finance

Principal Consultant

- Conducted deep "people-process-tech" assessments at a $1B CPG manufacturing company —drove a roadmap for OEE uplift
- Deployed AI-driven maintenance agents that significantly cut reactive work by 30% and MTTR by 25%

◆IEEE Florida West Coast Section	Consultants Network	IEEE PES Power & Energy Society	AESS IEEE Aerospace and Electronics Systems Society	WIE Women in Engineering	IEEE Life members

ORGANIZER: AMHERCORP -- Hermann Amaya – hamaya@amhercorp.com

MACHINE LEARNING IN RELATION TO ARTIFICIAL INTELLIGENCE

Date:	**Friday, August 22, 2025**
Time:	**5:00 PM – 8:00 PM (EDT)**
Speaker:	**Stephen Skrzypkowiak, PhD, PE Consultant SMIEEE**
Location:	**Saint Petersburg Yacht Club, 11 Central Ave, St. Petersburg, FL 33701**
Cost:	**Admission $60 - Students $25, Includes Pizza Dinner and Parking at the Yacht Club.**
CEH:	**3 CEHs included in the Admission, Certificate available by selecting Yes at registration.**
RSVP:	**Online at: https://events.vtools.ieee.org/m/488294**
Questions:	**Hermann Amaya, Chair CNAG hermann.amaya.us@ieee.org**
	Guy Perry, Vice Chair CNAG guy.perry@bluocean.ai

Abstract: Machine learning (ML) is a branch of artificial intelligence (AI) that focuses on developing algorithms and models that allow computers to learn from data without being explicitly programmed. It's about equipping systems with the ability to learn, identify patterns, and make decisions based on data, rather than solely relying on pre-defined instructions.

Stephen Skrzypkowiak, SMI EEE, PhD, PE Consultant: Technical Lead and SME supporting the Science and Technology (S&T) Directorate of the Department of Homeland Security (DHS), the Transportation Security Administration (TSA), the Transportation Security Laboratory (TSL) and the Federal Aviation Administration (FAA) over the past 15 years as a Subject Matter Expert (SME) in x-ray physics, image processing, computer vision, and detection algorithm development over the full product life cycle of security screening systems.

Prior to 2003, served as System Architect in private industry/commercial environment for the development of x-ray-based explosives detection systems, including the development of detection, segmentation and reconstruction algorithms. Project Lead in collaborative efforts with geographically dispersed teams of software, electrical and mechanical engineers and university researchers. Adept at creating and driving solution for complex technical challenges with limited deadlines and budgets. Extensive work in government and commercial contracting, work plan development, and project management.

Directed research and development in reconstruction methods, computer vision, pattern recognition, signal processing, imaging processing, medical image analysis, video compression, and x-ray scanning systems. Software coded with VC++, Visual Studio and MATLAB. Extensive experience in file format standard establishment and definition in the DICOM and DICOS standards under the oversight of NEMA and the EDS N42.45 Image Standard under the oversight of the IEEE.

Project Engineer in the design and testing of the L3 Technology eXaminer 3DX 6000 system, the eXaminer 3DX 3000 and the eXaminer 3DX 1000 ARGUS EDS, including hardware and software architecture, the implementation of the real-time detection algorithm, the baggage viewing station and the image archiving system for the second generation certified systems.

IEEE PES Power & Energy Society™   ◆IEEE Florida West Coast Section   IAS IEEE INDUSTRY APPLICATIONS SOCIETY Linking Research to Practice

Symmetrical Components and Fault Calculations

Date:	**Friday, July 25, 2025**
Time:	**10:00AM – 3:00 PM (EDT)**
Speaker:	**Thomas H. Blair, Senior Engineering Fellow, Tampa Electric**
Location:	**Seminole Electric Cooperative, Inc. – 16313 N Dale Mabry Hwy Tampa, FL 33618**
Cost:	**$100 Members, $200 Non-Members, $20 Students**
CEH Credits:	**Four (4) Continuing Education Hours will be awarded.**
	Be sure to enter your name and PE number on the signup website as it appears on your license.
RSVP:	**Online at: https://events.vtools.ieee.org/m/483524**
Questions:	**Tom Blair - tom_blair@ieee.org, Kayla Allemang – kallemang@ieee.org**

The seminar will include:

♦ Review of Basics
- o Phasors, Per-Unit

♦ Symmetrical Components
- o Physical Example of Vector Components
- o Application of Symmetrical Components to Three-Phase Power Systems
- o Electrical Characteristics of the Sequence Currents
- o The Delta-Wye Transformer

♦ Sequence Networks
- o Thevenin Reduction of the Sequence Networks

♦ Fault Calculations
- o Momentary versus Interrupting
- o Short-Circuit Faults

The level of difficulty of this course is Intermediate.

Speaker:

Tom Blair is a Senior Engineering Fellow with Tampa Electric. He performs electrical system analysis and uses the results to specify electrical equipment ratings, protective relay settings, and electrical system arrangement.

Tom has also been adjunct professor in the past at the University of South Florida and has presented courses at the university on topics such as Electrical Machines and Drives, Energy Production Systems Engineering, and the FE and PE (power) exam preparation course at USF.

Mr. Blair is a Senior Member of IEEE.

IEEE PES Power & Energy Society™   ◆**IEEE** Florida West Coast Section   **IAS** IEEE INDUSTRY APPLICATIONS SOCIETY — Linking Research to Practice

NFPA 70E Compliance Series, Session 1: From Exposure to Qualified Workers

Date:	Friday August 15, 2025
Time:	12:00PM – 1:00PM (EST/EDT)
Speaker:	AJ Khazami & Steve Antman, Sigma C Power Services GM & Application Engineer
Location:	Virtual: Google Meet – Link to be sent to registrants prior to event
Cost:	Free
CEH Credits:	One (1) CEH Each
RSVP:	Online at: https://events.vtools.ieee.org/m/488903
Questions:	Steve Antman - steveantman@ieee.org

Abstract This training is geared towards anyone who is occasionally exposed to electrical hazards as well as employees that are working with electrical daily. This will be a three part series that builds from exposure to qualified workers. This class includes Lookout / Tagout (LOTO) Protocols, work permits, and one-line diagrams.

Session 1 (Exposure, All) – Friday August 15, 2025

- **OSHA & NFPA 70E – Requirements for compliance and awareness of electrical workers**
- **Accident statistics and safety programs**
- **The "Qualified" person and their role in electrical work**
- **Hazard identification, and understanding of countermeasures**
- **Shock protection boundaries and the hazards of electrical shock**
- **Arc flash hazards to personnel and equipment**

Session 2 - Date TBD
Basic understanding of hazard warning labels (Moderate Hazard Exposure & Qualified Workers)

- NFPA 70E's hierarchy of controls and the effectiveness of deployed countermeasures
- Case studies in electrical hazards and their impact on personnel
- Understanding PPE systems and their correct usage

Session 3 - Date TBD
Simple lockout/tagout procedures and system diagram reading (Qualified Workers)

- In depth PPE usage and equipment handling
- Complex lockout/tagout procedures and establishing lockout points
- Verifying as de-energized and creating equipotential zones
- Energized electrical work and energized work permitting
- Task based qualification and safety countermeasures
- Establishing electrically safe work conditions, Special conditions & additional potential safety concerns

Calling all Power Industry & Computer Science Professionals
USF Interview Skills Workshop

Date: Friday September 12, 2025

Time: **9:00 am – 3:00 pm**

Location: USF Marshal Student Center (MSC) – Room TBD

IEEE Florida West Coast Section (FWCS) Power & Energy Society/Industry Applications Society (PES/IAS) is partnering with the USF PES Student Chapter to host an Interview Skills Workshop. This event is designed to help engineering students develop strong interview skills through expert insights, interactive presentations, and mock interviews.

We are seeking industry volunteers to support this event in the following roles:

- **Presenters:** Deliver a brief session (30 minutes) on interview strategies, such as behavioral questions, resume tips, STAR Method, technical question preparation, real-life experience, nonverbal communication, virtual interview best practices, or post-interview follow-ups – looking for multiple presenters on different topics

- **Mock Interviewers (45 minutes, per interview):** Conduct one-on-one mock interviews, providing students with valuable feedback – preferably hiring managers

This is a great opportunity to mentor the next generation of engineers, network with peers, and contribute to workforce development. If you are interested in participating, please contact one of the following IEEE FWCS PES/IAS Members by **Tuesday July 1, 2025**:

Kayla Allemang, kallemang@ieee.org

Ron Ambrosio, ron.ambrosio@ieee.org

Regan Sink, rjsink@ieee.org

Sohila Teama, sohila_teama@selinc.com

Thanh Le, TNLe@tecoenergy.com

Thank you for supporting future engineering professionals,

we appreciate your involvement!

SAVE THE DATE
FWCS End of Year
Gala Banquet

When: Saturday, October 25, 2025
          @ 5:00 PM – 10:00 PM
Where: St. Petersburg Yacht Club
          11 Central Ave.,
          St. Petersburg, FL 33701
Contact: Hermann Amaya,
          hermann.amaya.us@ieee.org

Register: https://events.vtools.ieee.org/m/488122

Celebration of FWCS

Speakers, Recognitions & Awards
Opportunity to Network with IEEE Members
Connect with Student Branch and Young Professionals
Amazing Yacht Club Dinner

Year 2025	Florida West Coast Section - Upcoming Events Summary		A*
Date / Time	Organization Contact	Description email Registration / Website	V or P
Thursday, July 3 6:30 pm - 7:30 pm	FWCS - CS Antra Melhotra	Monthly Meeting antra.malhotra@ieee.org https://events.vtools.ieee.org/m/485339	V
Thursday, July 10 12:00 pm - 1:00 pm	FWCS - PES/IAS Kayla Allemang	Interview Skills Workshop Planning Meeting kallemang@ieee.org https://events.vtools.ieee.org/m/483651	V
Thursday, July 18 6:00 pm - 7:30 pm	FWCS - CNAG Hermann Amaya	Generative Artificial Intelligence hermann.amaya.us@ieee.org https://events.vtools.ieee.org/m/488293	P
Friday, July 25 6:00 pm - 7:00 pm	FWCS - PES/IAS Kayla Allemang	Symmetrical Components and Fault Calculations kallemang@ieee.org https://events.vtools.ieee.org/m/484595	P
Thursday, July 31 7:30 am - 8:30 am	FWCS - PES/IAS Kayla Allemang	ExCom kallemang@ieee.org https://events.vtools.ieee.org/m/450345	V
Attendance: V: Virtual --- P: In Person --- V & P: Virtual and In Person			

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 Florida West Coast Section (FWCS) Tampa, Florida

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

July 2025 - Calendar of Events *(For more information see "Inside the SunCoast Signal" → Page 1)*

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				*FWCS PES/IAS Interview Skills ->Page 9	*Signal Inputs Due End of Day	
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					*FWCS PES/IAS Symmetrical Comp. ->Page 6	
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				*FWCS PES/IAS ExCom ->Page 9		