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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



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

The SunCoast Signal

The Institute of Electrical and Electronics Engineers, Inc.

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PE Corner

Art Nordlinger, PE, Life Senior Member

Records Retention

Chapter 61G15, Florida Administrative Code, contains two separate provisions that require licensees to retain records. The first of these provisions is found in Chapter 61G15-22, *License Renewal, Continuing Education*.

Chapter 61G15-22.006, *Demonstrating Compliance; Audits; Investigations.* (3) *The licensee shall retain such receipts, vouchers, certificates, or other papers as may be necessary to document completion of the continuing education pursuant to an audit for four (4) years from the date of completion of the continuing education activity.*

This provision requires each licensee to keep sufficient records to demonstrate that the minimum number of continuing education hours have been completed. These records are to be kept for no less than two renewal cycles or four years from the close of the renewal cycle that they were earned in. So, some records may actually need to be kept for up to six years for those professional development hours that were earned close to the beginning of a renewal cycle. For example, the most recent renewal cycle ended in February 2023. If you took a CE class in March 2023, you will need to keep that certificate until at least February 2029.

The second of these provisions is found in Chapter 61G15-30, *Responsibility Rules Common to All Engineers*.

Continued on Page 2

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

<https://events.vtools.ieee.org/m/451966>

**IEEE FWCS ExCom**

CHAIR: Michael Mayor, michael.mayor@ieee.org
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 Sylvia Thomas, sylvia@usf.edu
PES/IAS Power & Energy/Industry Applications Joint Chapter:
 Chair, Kayla Allemang, kalleman@ieee.org
RAS Robotics & Automation Chapter: Chair Sean Denny,
 venner20@ieee.org.
SP/COMM Signal Processing / Communications Joint Chapter
 Chair, Michael Ramalho, PhD, mar42@cornell.edu
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WEB PAGE: <https://r3.ieee.org/fwc/>

PE Corner - Cont'd from Page 1

Chapter 61G15-30.009, Retention of Engineering Documents. *At least one copy of all documents displaying the licensee's signature, seal which is legible to the reader, date, and all related calculations shall be retained by the licensee or the licensee's employer for a minimum of three years from the date the documents were sealed. These documents shall be maintained in hardcopy or electronic format.*

This provision requires each licensee to keep at least one copy of every document that was signed, sealed, and dated, regardless of whether it was physical or electronic. The provision requires these records to be kept for no less than three years from the date the documents were sealed. It allows the licensee to maintain these documents in hardcopy or in electronic format, provided the signature and seal can be verified. For example, in the case of an originally physically signed, dated, and sealed (embossed) document, the embossed copy can be scanned and maintained digitally provided the embossing on the original can be seen within the copy (typically accomplished by rubbing graphite over the embossing).

The provision also requires that each licensee or their employer retain all calculations relating to the signed, sealed, and dated documents for no less than three years from the date the documents were sealed. It also allows the licensee to maintain these documents in hardcopy or in electronic format.

One final word of caution.*Continued on Page 3*

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
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Modern SCADA Systems: Design, Security, and Troubleshooting

Date: Friday, February 14, 2025
Time: 10:00AM – 3:00PM (EST/EDT)
Speaker: Mike Cunningham – Qualus, Principal Engineer
Location: Seminole Electric Cooperative, Inc. – 16313 N Dale Mabry Hwy Tampa, FL 33618
Cost: Members: \$100; Non-Members: \$200; Students: \$10
CEH Credits: Four (4) CEHs
RSVP: Online at: <https://events.vtools.ieee.org/m/451530>
Questions: Kayla Allemang - kallemang@ieee.org

Abstract: This seminar provides an in-depth introduction to SCADA systems, covering approximately two (2) hours of foundational knowledge on their architecture and functionality. Attendees will explore the role of SCADA systems, current development trends, and advancements in securing these systems, including design, installation, and testing best practices. Key topics will include the integration of fiber optics, IEC 61850, and enhanced CIP Security measures, all of which significantly influence modern SCADA system design and implementation.

For the remaining time, the session will transition to practical troubleshooting and testing techniques. Instructors will demonstrate how to connect with RTUs (specifically SEL-RTACs) and various relays, identifying and addressing common issues that hinder successful SCADA system deployment. Participants will engage in interactive demonstrations to uncover subtle nuances in troubleshooting methods, fostering a deeper understanding of effective implementation strategies.

Mike Cunningham has over 40 years of experience in the communications engineering field. Starting as a Senior Engineering Manager in product development and design with an AT&T Paradyne Corporation (a Bell Labs company), to extensive experience with Progress Telecom (a Carrier's Carrier) in the high-volume carrier business, including working on 2 different Library of Congress projects in North Carolina and 1 ARRA funded project in Florida. The last 18 years he has been consulting on projects within the power industry.



Mr. Cunningham is a Communications Engineering Consultant/Project Manager with a proven leadership record and extensive industry experience in fields of power systems communications, SCADA, telephony, fiber optic broadband, computer systems, power, grounding, engineering services and new product development/support. Creatively driven to resolve issues. He is a Principal Engineer with a proven ability to plan, organize, manage and control costs. Consistently has received awards at presidential level for innovative work.

PE Corner - Cont'd from Page 2 - With the ever-increasing push toward paperless files, and the proliferation of hacking and ransomware attacks, computer back-ups and offsite storage are more critical than ev-

er. The loss of stored information does not alleviate the licensee from his or her obligation to comply with any of these requirements.



USF 2025 Power Forum

February 3, 2025 | USF Marshall Student Center Ballroom

Conference Overview

This conference will bring industry professionals, researchers, and students together to discuss recent advancements in power systems and energy solutions research at USF and industry innovations.

We invite your company to send representatives to table and potentially be an invited presenter at this exciting event! Please contact our general chair for more details on how to register for or sponsor this event.

Tentative Schedule

Activity	Time
Welcome & Registration	10:30am - 11:00am
Faculty Introductions	11:00am - 12:00pm
Company Introductions	12:00pm - 1:00pm
Lunch Speakers	1:00pm - 2:00pm
Networking and Tabling	2:00pm - 3:00pm
Graduate Student Poster Session	3:00pm - 3:30pm

General Chair

Nicole Ouellette ouelletten@usf.edu

Local Arrangements

Alexander Lee alee22@usf.edu

Event Registration

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Grad Students Poster Session

Dr. Zhixin Miao

Dr. Lingling Fan linglingfan@usf.edu

FWCS Liaison

Kayla Allemang kallemang@ieee.org



UNIVERSITY of
SOUTH FLORIDA





**INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
FLORIDA WEST COAST SECTION
IEEE FWCS LIGNELL AWARD
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. We are presently seeking nominations for this year's awards that will be presented at the Tampa Bay Engineers Week Banquet 2024 at Jewish Community Center in Tampa on **February 20th, 2025**. The Banquet Center is at **522 N Howard Ave, Tampa, FL 33606**. Please call **(813) 575-5900** for more directions.

There will be three best recipients of this award from the twelve counties and the winners will be invited to attend the banquet, with a guest, to be presented with the award and an honorarium. ***Please make certain that we will pay for the winner and one guest. Any additional guests must pay their own.***

If there is a teacher at your school who you think should be considered for this prestigious award, please complete the enclosed nomination form and return it to the above address no later **than December 20, 2024**. It is important to submit your nomination form and any supporting materials in digital format through your email account (in lieu of a signature).

An electronic version of the form can be downloaded from the Tampa Bay Engineering Week Banquet website www.tbewb.org and returned to me via mail or e-mail to venner20@ieee.org. We also encourage an additional narrative along with the nomination form that justifies the individual receiving this honor as the "Outstanding Teacher of Math and Science" in the entire county where they teach.

We would like to receive several of nominations of "deserving and qualified" candidates throughout the county. Please do not have a narrow screening process before the nominations are forwarded to me. If you have any questions, please do not hesitate to give me a call.

Sean P Denny
venner20@ieee.org
IEEE Senior Member/ STEM Champion
R3 Florida West Coast Section
Chair, IEEE FWCS Robotics and Automation





**INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
FLORIDA WEST COAST SECTION**

**IEEE FWCS LIGNELL AWARD
OUTSTANDING TEACHER RECOGNITION PROGRAM**

Nominators shall provide the following information with respect to the nominee's achievements and qualifications by filling in the Nominee's Information in Section A below and answering the questions in Section B. All information in Section B shall be limited to four (4) pages and shall be submitted electronically in a MS Word Document in essay style for submission to the selection panel. It is also encouraged to supply letters of recommendation and/or awards. Please scan these documents and submit electronically. This form inclusive of Section A shall also be submitted.

Goal

To recognize and honor outstanding contributions by teachers for pre-college education in Mathematics or Science.

Qualifications

Individuals teaching classes in Mathematics or Science in the public high schools during the current school year.

A. Nominee's Information

Nominee's Name:

Nominee's Position:

Phone Number:

Email:

School System:

School:

School Address:

Nominated by:

Nominator's Phone Number:

Nominator's Email:

Nominator's Position:

Nominator's Address:

B. Mandatory Qualification Information

- 1) Qualifying Class(es) taught by the nominee and number of year(s) each class was taught.
- 2) How long has the nominee been teaching the qualifying subject(s) for which he/she is being nominated?
- 3) Other activities the nominee has participated in, such as, sponsoring/coaching JETS, MATHCOUNTS, SCIENCE FAIR, etc.
- 4) Other Classes Taught by the nominee.
- 5) Why should the nominee be considered for special recognition?
- 6) What sets he/she above their peers teaching the same subjects?
- 7) How long has the nominee been teaching at his/her present School Assignment?
- 8) From which Universit(ies) did the nominee graduate, what degree(s) were earned and in which year(s)?

Please return all information to: Sean Denny, 5545 Dartmouth Avenue N, St. Petersburg FL 33710
Or to venner20@ieee.org no later than December 20, 2024.
Questions please call Sean Denny at (727) 678-0183

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

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

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

STEM Explorer Fest 2025 January 18, 2025 @ 10:00 am to 2:00 pm

It's time for STEM Fest 2025! Thank you for your interest in the STEM Explorer Festival, presented in partnership with the City of Largo. We are pleased to invite you to attend our event as a presenter. The event will be held on Saturday, January 18, 2025, from 10:00AM to 2:00PM at Largo Central Park, 101 Central Park Dr, Largo, FL 33771. Our goal is to provide hands-on, interactive learning opportunities for our students that showcase the STEM skills used by various employers and community organizations in Pinellas County. Please contact Cathie Mullins, Pinellas County Schools Secondary STEM, at mullinsc@pcsb.org if you have any questions or special needs that are not covered here. Thank you!

**Instructional Staff Developer
Pinellas County Schools (727) 588-6338**

PES/IAS ExCom VIRTUAL January 30, 2025, 12:00 pm - 1:00 pm <https://events.vtools.ieee.org/m/450334>

SunCoast Signal Advertising Rates

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

**IEEE FWCS
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Florida West Coast Section Tampa

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January 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	7	8	9	10	11
		*FWCS ExCom →Page 1				
12	13	14	15	16	17	18
	*Signal Inputs Due End of Day					*STEM Explorer Fest -> Page 7
19	20	21	22	23	24	25
26	27	28	29	30	31	
				*FWCS PES/IAS ExCom ->Page 7		