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Florida West Coast Section
<http://www.ieee.org/fwcs>

The SunCoast Signal

The Institute of Electrical and Electronics Engineers, Inc.

Vol. 67, No. 3, March 2021

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PE Corner

Art Nordlinger, PE, Senior Member

You Renewed Your License; Now What?

The deadline has passed for license renewal in Florida. Hopefully, you have completed your continuing education requirements and renewed your license. Now what? If you are like many of us, you won't think about continuing education for another 20 or so months and then rush to get your hours done before the next renewal deadline. What are you going to do with all that spare time until then? Let me make a couple of suggests.

You can earn double the hours by presenting a technical seminar to your peers under IEEE's continuing education program. Every one of us has an area of expertise. Sharing your knowledge with others provides personal satisfaction, as well as earning hours toward your next license renewal. Talk to me or any IEEE officer about topics that you can present and earn some hours.

Lend your spare time to IEEE as an officer. You'll help yourself, your peers, and IEEE as a whole. You can earn four Continuing Education Hours (CEHs) each renewal cycle for servicing as a professional society officer.

Mentoring a young engineer, or an engineer intern, is a very rewarding way to give back to the profession. There are many ways in which you can help our younger peers to advance in their careers. For example, you can encourage new engineers just out of school to take the FE (EIT) exam now while the information is still somewhat fresh. Few of us knew early in our careers where our path would ultimately lead. And those just starting out may not know at this early point in their careers whether they'll need to have a PE license someday or not.

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UPCOMING MEETINGS

EXCOM

Tuesday, March 2nd, 2021

Google Meet

Register with vTools

<https://events.vtools.ieee.org/m/260894>

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We all know that if you don't take the FE exam shortly after graduation, it's a pretty monumental task for most engineers to "re-learn" enough of what they learned in college to pass the test. Just the thought of studying all of that material in order to pass can be daunting. A recent change to the licensure rules has "uncoupled" the experience requirement from registering to take the Principles and Practices exam (the PE exam). This change may benefit some new engineers in completing the exam and experience requirements for professional licensure.

Those are just a few suggestions of the endless opportunities that we all have to give back to the industry. I hope that you are able to avail yourself of some of these in the near future.

Whether you are a PE looking to attain required CEHs, or an engineer looking to learn something new or keep current with the latest trends in the profession, IEEE has seminars that will meet your needs.

Wrong First Name**In****Mailing Address****Dear IEEE FWCS Section Members,**

You may have noticed the February Suncoast Signal Newsletter was issued with the wrong first name in the labels.

This was my mistake when creating the labels and sorting the names out.

I apologize for the confusion and hope to correct them in the future.

*Sincerely,**Paul Belussi**IEEE FWCS Chair*



P & E Seminar
NUSCALE POWER SMR DESIGN OVERVIEW AND LICENSING STATUS

Date: Thursday, March 05, 2021

Time: 4:00 PM – 6:00 PM EST

Speaker: Steven Mirsky, NuScale Power

Location: Google Meet

Link will be provided to Registrants the day before the meeting

Cost: There is NO Cost for this meeting.

CEH: There are NO Continuing Educational Hours (CEHs) offered for this meeting.

Registration: <https://events.vtools.ieee.org/m/256678>

Questions: Chuck Hawkins, chuck.hawkins1@gmail.com

Abstract: Mr. Mirsky will present the history of NuScale Power with respect to the development and licensing of its unique SMR. This SMR design concept and safety case will then be described. Key innovative systems, structures, and components will be presented. Mr. Mirsky will discuss nontraditional applications of the NuScale SMR in comparison to the current operating fleet of commercial nuclear power plants. Finally, he will provide information on the U.S. nuclear power plant licensing of the NuScale SMR along with near term deployment plans and opportunities.

Biography: Steven Mirsky has been with NuScale Power for over 11 years. He is currently a Senior Technical Advisor in the NuScale Office of Technology working on micro-reactor designs and innovative applications for the SMR. Previously, he was the NuScale Licensing Manager in which he was responsible for directing U.S. Nuclear Regulatory Commission (NRC) review responses and interactions for some of the chapters and parts of the NuScale Design Certification Application (DCA), Nuclear Energy Institute (NEI) interface, and oversight of all NuScale Rockville office activities. The NRC issued an SER for the NuScale SMR DCA in August 2020.

Mr. Mirsky has more than 44 years of experience in the nuclear industry. He has worked for Science Applications International Corporation (SAIC) and NUS Corporation consulting for U.S. and foreign nuclear power plants, DOE, and the NRC and at the Baltimore Gas and Electric Company (now Exelon) and Virginia Power and Electric Company (now Dominion Power) supporting the safety analysis, design, operation, licensing, and analysis of the Surry, North Anna, and Calvert Cliffs nuclear power plants. He holds an M.S. in Nuclear Engineering from Pennsylvania State University, a Bachelor of Engineering in Mechanical Engineering from Cooper Union, and is a licensed Professional Engineer in Mechanical Engineer in the State of Maryland.

Google Page Rank and Beyond

The Science of Search Engine Rankings

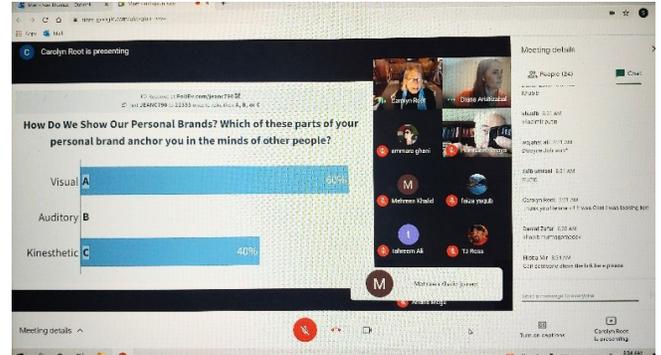
Date: Thursday, March 11, 2021
Time: 6:00 PM – 7:30 PM EST
Speaker: Michael A. Mayor, MSE, PE
Location: Google Meet
Link will be provided to Registrants the day before the meeting
Cost: There is NO cost for this meeting.
CEH: There are no Continuing Education Hours (CEHs) offered for this meeting.
Registration: <https://events.vtools.ieee.org/m/255668>
Questions: Michael Mayor michael.mayor@ieee.org

Abstract: This presentation covers the science of search engine rankings developed by Google. This is a multinational, publicly traded, company very well known in the Internet, built around the hugely successful search engine. In fact, the search engine and particularly the mathematics behind it, is one of the reasons of Google's huge success in the Internet arena. Search Engines have become an integral part of handling Big Data where searches must be conducted, preferably in seconds, over millions of entries. This talk addresses first a brief history of Information Retrieval and the early search engines, like Boolean, Vector Space, Probabilistic and Meta Search Engines and subsequently goes into an in depth explanation of the search process. The lecture continues with an explanation of the Page Ranking method and the Mathematics of Google's PageRank. Finally, I present an overview of the massive Computer Hardware, i.e. server farms, which make possible a practical, real-time, implementation of the PageRank algorithms. Cleve Moler, the founder of Matlab, wrote an article for his October 2002 Newsletter *Matlab News* that cited PageRank as "*The World's Largest Matrix Computation.*" Then Google was applying the power method to a sparse matrix of order 2.7 billion. Now it is up to 8.1 billion.

Biography: Michael A. Mayor, MSE, PE is a Consulting Scientist providing services in the areas of Information Management Systems, Secure Telecommunications, Precision Geolocation, Digital Instrumentation and RF Propagation Modeling and Analysis. Formerly, he was Vice President / Chief Scientist, Advanced Technology Research, in the Aerospace/Communications Division of ITT Defense Electronics. In this capacity, he conducted Research and Directed the Development and Deployment of a wide range of Mobile Secure Wireless Communications and Emitter Geolocation Systems and their components. These included: Radio Frequency Transceivers, Software Defined and Cognitive Radio Systems, Digital Receivers and Digital Signal Processing algorithms. These activities extended to the application of Digital Instrumentation to System Test and Validation. He authored six patents in Spread Spectrum Communications and Digital Instrumentation. He received the ITT Defense & Electronics Engineered for Life Award, for his technical contributions in Communications and Microelectronics.

He is a Life Senior Member of the IEEE and an active member of the Florida West Coast Section, where he holds the positions of Vice Chair of the joint Chapter CS/AESS and Editor of the monthly publication the SunCoast Signal. He is a Licensed Professional Engineer in the State of Virginia and holds a Master of Science in Engineering (MSE) in Systems Engineering (Communications and Signal Processing) from the School of Engineering and Applied Science, University of Pennsylvania.

Women in Engineering International Network Connections



Diana Aristizabal, Chair of the IEEE WIE, Ammara Mehd Ghani, Vice Chair IEEE WIE & YP Florida West Coast Section, and T.J.Ross, Chair IEEE YP Florida West Coast Section and other members of the IEEE Florida West Coast Section are excited to introduce WINC, the *Women In Engineering International Network Connections!*

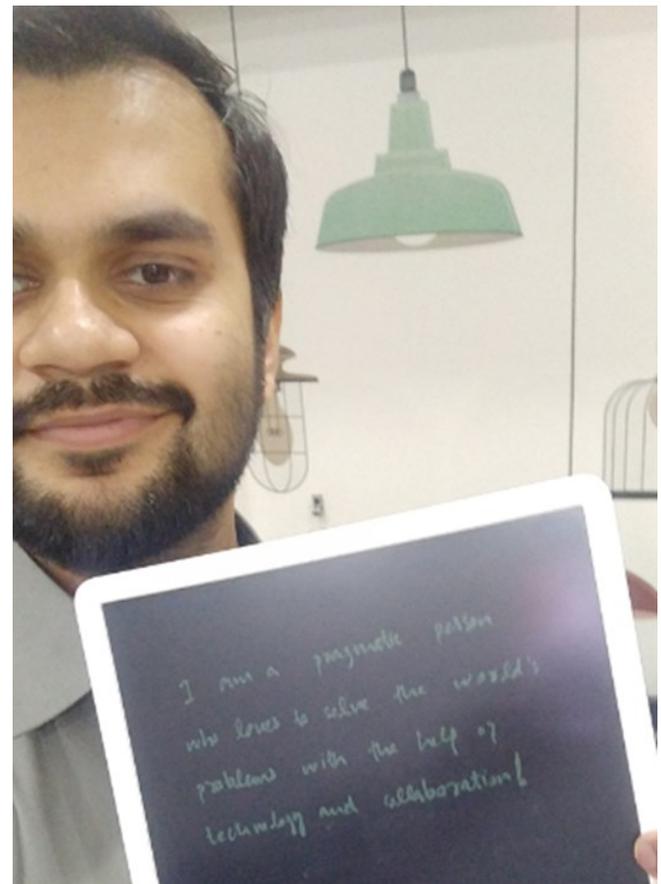
This is IEEE WIE Florida West Coast Section's outreach arm, to engage others for networking, professional development and to raise the awareness of IEEE and WIE.

We held our first event WINC event on 1/23/2021. This was our most successful WIE event to date, and a great way to kick off WINC! We held a professional development workshop on "Developing your Professional Brand." This was a joint event with IEEE Young Professionals and the IEEE Islamabad sections.

The virtual event engaged engineers, students and friends from the US and Pakistan. The presenter was Carrie Root, CEO of Alpha UMi, a developer of leadership training curricula, and an IEEE and WIE member.

Very positive responses were shared following the event, with observations that this topic was an eye opener. Often engineers don't think about the image they project. Responses also indicated a strong desire for more workshops on Emotional Intelligence, Business Ethics, Growth Mindset and Conflict Management.

More events such as this one will be scheduled. We also have established a Facebook Group where we engage on many topics and share event information. We invite all of you to join the Group and participate in our events.



Our next event is planned for March and will be on Emotional Intelligence.

dianaaristizibal08@gmail.com

#WomenInEngineering
#IEEEYoungProfessionals
#Empowering Engineers

So, you are not an IEEE Senior Member of yet?

Well, this is something that we need to correct!

First, you must know that elevation to the Senior Member Rank of IEEE is amazingly simple, non-problematic and free of painful requirements on your part. This is a distinction that you have earned if you have accumulated ten years of professional practice and service to IEEE. In addition, there is some leniency in these requirements because the ten years include the time you spent in education and if you have a BS, MS or PhD this time includes 3, 4, or 5 years which gives you a break in the professional practice requirement.

So, you say: "Is that all?" Well, there are a couple of additional requirements you must abide by and follow but they are not too stringent. If you examine your conscience and find out that you do have the required professional service requirement, then you have to gather some courage and write a letter to me via email and let me know that you found out about Senior Membership when you read this article in the "Signal" and request to be elevated to the rank of Senior Member as soon as possible. Now, let me set your mind at ease because this elevation process is not something that will set you back some dough or increase your membership dues in any way, shape or form because like I said, you have earned this distinction and honor through your professional service.

What else is there? You will need to participate in a get-to-know-you telephone conversation with your Reference Providers to meet the requirement of Acquaintance and discuss your resume to tell us about your accomplishments. Also, I will send you an email outlining the requirements and how to structure your professional resume, so you include your professional experience, IEEE Service and significant performance and this is the hardest part of this process. The good part is that you will not have to do anything else since I will nominate you to become a Senior Member even though I do not know you and will assign reference providers, because you need at least two Senior Members and we will vouch for you before the Advancement and Admissions Committee who is the final authority who will approve your nomination and elevation to Senior Member.

It might interest you to know, that the Florida West Coast Section of IEEE through its Senior Member Elevation Committee has promoted to the rank more than 76 new Senior Members in the last two years and we are planning to elevate as many candidates as necessary to make sure that all worthy IEEE Members get their Senior Member Plaque.

So, I invite you all to review your professional experience and write to me informing me that you are eligible, and I will take your case and run with it until we get you elevated to Senior Member. In addition, if you know of a colleague or friend that meet the requirements for elevation then let him/her know about our program. I look forward to receiving your request for elevation.

Hermann Amaya, Chair
Senior Member Elevation Committee
hamaya@tampabay.rr.com

IEEE USF Student Branch Spring E-Banquet

The banquet will take place on March 30th from 7-9PM.

We will showcase mentorship projects, highlight our competition level projects progress, and recognize certain students such as some of our graduating seniors.

We will be selling raffle tickets to sponsor a surprise announcement, more details to come!

Date: Tuesday, March 30th 2021
Time: 7:00 pm - 9:00 pm EST
Location: Virtual (Microsoft Teams)
(Link will be distributed later)
Cost: There is no cost to attend this event

Register for the event at:

<https://events.vtools.ieee.org/m/260517>

Join the IEEE USF Student Branch in celebrating the competition of our 2020-2021 academic year!

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	\$38	\$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



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Or Fax your address changes to (732) 562-5445

March 2021 Calendar of Events <i>(For more information see Page 1 in this Signal)</i>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		*EXCOM Google Meet			*Signal Inputs *P&E Seminar	
7	8	9	10	11	12	13
				*Google Page Rank...		
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			
		*USF Student Branch...				