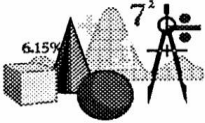




SPARKS

Daytona Section Newsletter
January 2020



SECTION MEETING

Thursday January 23rd at the Halifax River Yacht Club
331 South Beach Street, Daytona Beach, Florida 32114

PRESENTATION

**THE USE OF ARTIFICIAL INTELLIGENCE IN
HALIFAX HEALTH INFORMATION TECHNOLOGY**



2019 Outstanding Section Membership
Recruitment Performance
Daytona Section

CHAIR'S REPORT



Happy New Year! It is interesting that we have reached a year that also means good eyesight, as in 20/20. In my career as an electrical engineer, I have been part of organizations that had ambitious goals that labeled them with names that include the number 2020, partly because it suggested that we had a visionary look at the future and because the year numbered 2020 represented a far off year that, because of the length of time available, almost any goal labeled 2020 could be attained. Not all of these goals were met, and, often, huge changes occurred in industry that made these goals irrelevant. Still, it was good to have common goals that all were working towards.

In addition, I was offered retirement plans labeled 2020 that would slowly convert equities into bonds, thus, as the advertising went, allowing people to initially have good financial growth and later financial stability as we approached our retirement years. Having a minor in economics, I avoided these types of investment programs not because they are bad, but perhaps a little knowledge made me feel I could do better. The jury is still out on that.

The huge change-taking place concerning retirement is that many professionals, including engineers, are not retiring at 65 years old. Because of better health and demand for people with experience, the standard retirement age has disappeared. Therefore, we take courses, read articles and books, and meet with others to keep ourselves up to date

on technology. Our engineering students today have different career goals than I had as a student, and I admire them for it.

At the IEEE Daytona Section meetings, we have people speak on the latest technologies. This month, for instance, we will have a discussion on the use of artificial intelligence. This January topic is a continuation of exciting topics that the Daytona Vice Chair, Dr Helen Hernandez, has arranged for the membership.

My wish for you is a prosperous 2020.

Rich

NOVEMBER'S PRESENTATION

USE OF TECHNOLOGY AND AI IN THE POWER GRID

Michael Putt, PE, from Florida Power and Light, presented an informative overview of the smart grid, the power grid, the deployment of drones and use of AI to improve and monitor the power grid.



Michael Putt shown with Section Vice Chair Dr. Helen Hernandez

JANUARY'S PRESENTATION

THE USE OF ARTIFICIAL INTELLIGENCE IN HALIFAX HEALTH INFORMATION TECHNOLOGY

To improve operations at Halifax Health, the deployment of in-workflow technologies is an essential part of enhancing care for patients. The system uses artificial intelligence and is used by more than 500 physicians, representing 54 sub-specialties in medicine.

This AI-powered solution uses the benefits of Dragon Medical One cloud-based speech recognition with the aim to make documentation more clinically focused, improve physician engagement with quality initiatives (e.g., the CMS-mandated Merit-based Incentive Payment System), and bring Halifax Health closer to their goal to achieve clinical documentation excellence.

Tom will be explaining the architecture of AI-powered encounter documentation with all its time-saving components and how it has contributed on other levels, including its positive impact toward the prevention of physician burnout.

The presentation will also reveal how AI is deployed in one of the Halifax Health Cyber appliances.

OUR SPEAKER



Tom Stafford is the Vice President and Chief Information Officer at Halifax Health. Tom joined the organization more than 11 years ago, after a decade working as an engineer and product developer in the medical device industry.

A veteran of the U.S. Navy, Tom holds a Bachelor's degree in Aerospace Engineering from Embry-Riddle Aeronautical University, and a Master's degree in Mechanical Engineering from the University of Central Florida. He is also a certified project management professional with more than 20 years of experience, managing technically complex projects. In addition, he holds his Green Belt Six Sigma certification.

Responsible for overall leadership in every IT initiative at Halifax Health, Tom blends his engineering experience of optimizing processes and systems with his management skills for mentoring and coaching staff. In doing so, he has created a culture that has put the hospital on Computerworld magazine's *Best Places to Work in IT* four years in a row. In addition, Tom won a 2017 Computerworld Premier 100 Award for his leadership and innovative approaches and was named one of the top 105 CIO's to watch in 2018 by Becker's Healthcare.

ANOTHER TALE FROM THE OLD PROFESSOR

WHY ARE CARPENTER'S PENCILS FLAT?

Not too long ago I heard on the radio a cute but silly little song sung by the American jazz singer Blossom Dearie, (1924-2009); "Rhode Island is Famous for You". The song was from a 1948 Broadway musical, "Inside U.S.A."; music by Arthur Schwartz and lyrics by Howard Dietz. The show opened on Broadway but was transferred to off Broadway after 5 months and closed after another 5 months which is really unfortunate as Schwartz and Dietz had composed some very popular songs used in other shows. Some of the verses are below.

Copper comes from Arizona
Peaches come from Georgia
And lobsters come from Maine
The wheat fields
Are the sweet fields of Nebraska
And Kansas gets bonanzas from the grain

Old whiskey comes from old Kentucky
Ain't the country lucky
New Jersey gives us glue
And you, you come from Rhode Island
And little old Rhode Island
Is famous for you

Pencils come from Pennsylvania
Vests from Vest Virginia
And Tents from Tent-esee
They know mink where they grow
Mink in Wyo-mink
A camp chair in New Hamp-chair
That's for me

And minnows come from Minnesota
Coats come from Dakota
But why should you be blue?
For you, you come from Rhode Island
Don't let them ride Rhode Island
It's famous for you

Being a native son of New Jersey I wondered what the connection was between glue and the Garden State. As it turns out, the Borden Dairy Company that created Elmer's glue used a cartoon depiction of a cow, Elsie, in their ads for their milk products. But the Borden Company wanted a real cow and they chose a bovine from the Walker-Gordon Dairy farm in Plainsboro, N.J.



Elsie started her public appearance career at the 1939 World's Fair in New York City. Two years later, heading to a public appearance, the semitrailer that was Elsie's "Cowdillac" was rear-ended by another semi and Elsie was seriously injured. She died of her wounds and is buried in Plainsboro on the same farm she was born. Her tombstone is a tourist attraction today. But how does Elmer fit in to this story? Elsie's "husband", a bull of course, was Elmer who only existed as a cartoon and never a real kicking and snorting bull but his legacy lives on with his image on every container of Elmer's glue.

But I also wondered about the pencils from Pennsylvania. Pencils were imported from England until the War of Independence. It is not completely sure if one manufacturer could be singled out as the first supplier of American-made pencils. However, one brand I have always associated with wooden pencils is Dixon Ticonderoga. The company was formed in 1794 as a merger of two companies; one in New Jersey and the other in Pennsylvania. The Ticonderoga connection is the source of graphite from New York. Therefore, Dietz, the lyricist of the Broadway flop, wasn't too far off on pencils from the Quaker State.

In the 18th century at the time of the American Revolution, most writing was done with ink and quill pen. Engineers and carpenters needed a waterproof, portable method of writing on paper and other substrates such as wood. Also, engineers desired an erasable line so changes could be made. (Engineering changes? Nah! Never happens. It's a myth!) Engineers and carpenters can be credited for the rise in popularity of pencils.



Most pencils in the U.S. before the American Revolution were square. Thanks to the Dixon Ticonderoga Company, the most common shape today is hexagonal. Round or hexagonal pencils are particularly undesirable to carpenters as they roll easily. If you were working on a roof and inadvertently dropped your pencil on the roof it would promptly roll to the ground and another trip down the ladder.

Carpenter's pencils are flat and won't roll off a roof. You now have learned an important historical fact from your humble correspondent. Would you like to know why manhole covers are round? I may disclose that in a later Tale.

Dr. Al Helfrick, a.k.a The Old Professor

PE CORNER

WHAT QUALIFIES FOR CONTINUING EDUCATION HOURS (PART 1)

It's a new year and you're thinking, "It's time I got serious about getting some Continuing Education Hours (CEHs)." This seems like an appropriate time to talk about what you can do to earn your CEHs. Maybe you are dreading the thought of having to sit through 16 hours of technical education (section 2, below). Well, there are other things that qualify for CEHs of which you may be able to take advantage. Sections 61G15-22.003 and .004 of the Florida Board of Professional Engineer's rules address this. The first section addresses Qualifying Activities for Area of Practice Requirement and the second Conversion of Education Units to Continuing Education Hours. I'll combine the sections here and provide some editorial commentary.

(1) Successful completion of college courses.

One (1) college semester hour credit is equal to 45 continuing education hours

One (1) college quarter hour credit is equal to 30 continuing education hours.

Yes, you can complete the entire requirement by taking one college level course in your area of practice. And no, you can't "carry over" CEHs from one renewal period to another. I would note that there are states (other than Florida) that do allow some amount of carry-over. This has been discussed by both the Continuing Education Committee and the full Board and, at least for now, no action is contemplated.

(2) Successful completion of short courses, tutorials, webinars, and distance education courses offered through delivery methods such as live, correspondence, recorded, Internet-based; or attending seminars (including in-house engineering seminars), workshops, or professional and technical presentations at meetings, conventions or conferences presented/sponsored by a provider or vendor with specific knowledge related to the licensee's area of practice approved under Rule 61G15-22.011, F.A.C.

One (1) contact hour of professional development in course work, seminars (including in-house seminars at an engineering firm), or professional or technical presentations made at meetings, conventions, or conferences is equal to 1 continuing education hour.

Note that Rule 61G15-22.011 requires that providers and content be approved by the Board. So if you are planning to go this route, make sure that the provider and content have been approved. IEEE and other professional societies are "exempt providers" and don't have to have individual courses approved.

(3) Teaching or instructing in subsection (1) or (2) above. However, teaching credit is valid for teaching a course or seminar for the first time only. Teaching credit does not apply to full-time faculty.

For teaching of subsections (1) through (3) above, apply a multiple of 2, if the requirements of subsection 61G15-22.003(3), F.A.C., are met.

Here is a way for many of us to get double credit by teaching a course with appropriate technical content in our area of expertise. Talk to an IEEE officer about this opportunity.

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. With renewal only 12 months away demand for our seminars is high. Sign up now!

Art Nordlinger, PE, Senior Member

DAYTONA SECTION SHIRTS



We are pleased to offer Daytona Section polo shirts for our Section members. The shirts are embroidered with the IEEE Logo and DAYTONA SECTION on the left and your name and grade, if desired, on the right. The shirt is a high quality 5 oz, 65/35 poly/cotton pique in Royal Blue with white embroidery. Available in S - 2XL in men's as well as ladies' sizes. Price is \$30, including tax, for S-XL size's, 2XL size is \$3 additional.

For more information or to order shirts contact: Allan Jusko 386-671-3706 or a.jusko@ieee.org.

FUTURE MEETING DATES:

Dates for the 2020 spring session are: Feb 27, Mar 26, and Apr 23.

EDITORS NOTES

Visit our Daytona Section website: <https://ewh.ieee.org/r3/daytona/>

ENGINEERING HUMOR

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"THE COMPUTER SAYS I NEED TO UPGRADE MY BRAIN
TO BE COMPATIBLE WITH ITS NEW SOFTWARE."

2020 SECTION OFFICERS

Chair – Richard Kent

206-369-1965 rtkentjr@msn.com

Vice Chair – Dr. Helen Hernandez

386-872-0483 hhernandez@ieee.org

Treasurer - Dr. Jianhua Liu

386-226-7713 liu620@erau.edu

Secretary – Ron Gedney

386-847-8094 r.gedney@ieee.org

Awards Chair – Dr. Keith Garfield

386-226-7081 garfielk@erau.edu

Publicity/Media – John Horner

201-240-6689 jhorner@gmail.com

Life Member Chair – Ron Gedney

386-847-8094 r.gedney@ieee.org

Vice Chair – Martin Oksenhorn

383-283-4339 moksenho@yahoo.com

Computer Society Chair – Dr. Keith Garfield

386-226-7081 garfielk@erau.edu

Student Activities

ERAU - Dr. Keith Garfield

386-226-7081 garfielk@erau.edu

B-CU - Dr. Xiaohe Wu

wux@cookman.edu

ERAU Student Chapter Chair- Victoria Rutenbeck

Rutenbev@my.erau.edu

ERAU WIE Chair – Gabrielle Stoney

stoney@my.erau.edu

B-CU Student Chapter Chair – Jodi Sanderson

jodi.a.sanderson@students.cookman.edu

Webmaster – Charlie Husbands

386-760-7163 chusbands@ieee.org

SRT Project Coordinator - Charlie Husbands

386-760-7163 chusbands@ieee.org

SPARKS Editor - Allan Jusko

386-671-3706 a.jusko@ieee.org

JANUARY 2020 MEETING

Thursday January 23rd at the Halifax River Yacht Club
331 South Beach Street, Daytona Beach, Florida 32114
Just south of the Fire Station at the corner of Beach and Orange Streets

TOPIC– The Use of Artificial Intelligence
in Halifax Health Information
Technology

SPEAKER – Tom Stafford, Vice
President and Chief Information Officer
at Halifax Health

AGENDA

5:30 PM Greetings & Cocktails
6:00 PM Dinner
7:00 PM Presentation

Dinner Selections

Flat Iron Steak - with a mushroom and Dijon mustard cream sauce

Chicken Piccata – Egg battered and sautéed with fresh mushrooms, capers and lemon butter

Flounder Almandine - Sautéed flounder, brown butter, lemon and almonds

All Dinners come with HRYC House Salad and Bread Service, Coffee or Tea

Members and guests \$20.00 each
Students \$5.00

IMPORTANT DINNER NOTE!

The Yacht Club is requiring us to give them a dinner count by the Tuesday afternoon before our meeting. As always, all members and guests are welcome to attend the meeting and presentations, however any dinner requests received after Tuesday afternoon may not be accepted

**Please contact Allan Jusko by Tuesday January 21st at noon
to give us a count for dinner or for further information**

If you make reservations and are unable to attend, call prior to the event to cancel.

The Section is charged for all dinners ordered, please let us know if your plans change

Allan Jusko Editor

386-671-3706