







SEPTEMBER 2013 MEETING

Thursday September 26th at the Halifax River Yacht Club 331 South Beach Street, Daytona Beach, Florida 32114

TOPIC - Methods for encouraging computer literacy and programming skills

OUR SPEAKERS - Dr. Keith Garfield and Ms. Hiranya Mir, Embry-Riddle Aeronautical University

CHAIRMAN'S REPORT

I hope you all had a nice Summer. Mine started April 5th with SoutheastCon in Jacksonville. It was all run by Butch Shadwell, our Engineer's Week speaker who put together a highly competent team. I always enjoy watching the robot competition. Teams from ERAU and BCC were there. Later in April these teams presented their designs at our regular meeting. Also at this meeting our Science Fair Winners joined us, with their families, so we could present them. The next generation is in good hands.

In addition to being the chair of our Section I am also the Secretary of the Florida Council of the IEEE. The Chairs of the 13 IEEE Sections in Florida meet three times or more a year to discuss the problems of running a Section as well as other IEEE activities of interest in Florida. The central theme of these meetings is Membership Development. Now any IEEE member in Volusia or Flagler counties is automatically a member of our section. I don't think we can increase membership by persuading more IEEE members to move here so the alternative is to persuade local engineers and others who qualify for IEEE membership to join. If you know of any such person please let us know. We will invite them to some of our meetings and, of course, shower them with applications and propaganda.

We have four kinds of members: Students, Retired IEEE members, Academic IEEE members and Industry Members. The last category is where we might do better. Retired is out of our control. Students and faculty are under some gentle but firm pressure from their institutions to join because it enhances their value as Professors or prospective employees. The last category, industry engineers, is the tough nut. What does a working engineer get in his/her paycheck for joining? No employer will give you a raise for joining IEEE.

Perhaps by providing a place where engineers from different companies in the area can meet each other, discuss work problems, exchange ideas and indeed network, even if they are not unemployed, against the possibility that might happen. We really don't have that many industry engineers in our area. Most of my career was in the LA area and we had lots of working engineers. Even though there were plenty of jobs for Aerospace engineers it was good to learn about the other companies, where the programs were and the possibility of moving up by moving over. IEEE had a value. I don't know what we can do to attract members from local industry. We might try special technical sessions but there

does not seem to be much overlap in the technical interests of Teledyne, Raydon, Spartin, etc. I don't know but I am asking for any ideas you may have.

I hope to see you at the September meeting. Jeanette has arranged for an interesting program focused on expanding computer literacy. I've been using computers for 63 years now and what I really need is a "new buzzword" translator. Some of them are really old like "the cloud". Before we all had our own computers they had a mainframe. Linking terminals by hard wire throughout the building was like a cloud. Data access and processing was done in a separate large air-conditioned room or building where racks of million dollar hardware did the job.

In the meanwhile you all can help me by giving me your preferences. What would persuade you to come to our meetings? Please let me know at <u>tracy@alum.mit.edu</u>.

Tracy

SEPTEMBER PROGRAM

Dr. Keith Garfield and Ms. Hiranya Mir will do a presentation on methods for encouraging computer literacy and programming skills, including a discussion of computer literacy in the modern era and challenges to assumptions of computer literacy based on age, ethnicity, and gender. A case study on a summer program for middle school girls will be presented, as well as scholarly research and sample practice assignments for adults from non-technical backgrounds.

OUR SPEAKERS

Dr. Garfield is an associate professor at ERAU, teaching the formal mathematics and formal representations necessary to pursue software and computer engineering disciplines. Dr. Garfield also teaches courses discussing the underlying nature of computer programming languages, software engineering processes, and modeling and simulation techniques. Prior to his appointment at ERAU, Dr. Garfield worked as an engineer performing structural analysis on space flight hardware with McDonnell-Douglas, as an engineer on the shuttle payload integration team at the Kennedy Space Center, and as a researcher at the Institute for Modeling and Simulation at the University of Central Florida. Dr. Garfield's current research activities include participating in experiments for the FAA's Next Generation Airspace program, creating artificial intelligent agents that interact with humans in natural ways, and using fuzzy logic to study complex system behavior. He is the current advisor of the ERAU Artificial intelligence club.

Hiranya Mir is a recipient of the NCWIT Aspirations in Computing Award and a sophomore in Computer Science at Embry-Riddle Aeronautical University. She is passionate about bringing different groups of people into the field of Information Technology.

ANOTHER TALE FROM THE OLD PROFESSOR

RADIO ROW

I was born during the very last days of the WWII and received a ration booklet at the moment of birth which was never used. As a young child, I remember seeing the booklet which my mother kept with her treasures such as old birthday cards and report cards from the school. The reason my mother kept the old report cards is they portrayed me as a very capable person. What I was most capable of was "improvement".

The ration coupon booklet was most revealing to me. Apparently I was born with a different first name as the ration coupons were assigned to "Baby". With all due respects to Babe Ruth, I feel very fortunate that my parents had the foresight to change my name.

One aspect of rationing that I never really understood was why a person as young as I was when I was born would be entitled to a number of automobile tires or so many gallons of gasoline. Very few people drive cars when they are born.

As a young boy, I learned about the War from a most unlikely source, war surplus. After the War, the American defense industry had such a stockpile of war material that a new industry sprang forth; the surplus store. As a boy scout we slept in a variety of army surplus tents; used Army canteens attached to olive drab web belts; used army camp stools, water bags, machetes and so on. Army-Navy stores sold all types of surplus clothing such as very warm wool gloves and socks and even the boots to go with them.

The surplus that intrigued me the most was surplus electronics. Most medium sized towns had an Army-Navy store but surplus electronics tended to be concentrated in the large cities. Not only did these stores tend to be in the larger cities but managed to be mostly on the same street within a few blocks of each other. This gave rise to the name, "Radio Row".

New York City's radio row was on Canal Street in the southern tip of Manhattan. As a young lad, I lived near Philadelphia where radio row was on Arch Street, the same street where Betsy Ross made our first flag.

I became a radio amateur when I was eleven and my friend Donald got his license about a year later. When we were about 14 or 15 years old we were permitted by our parents to travel to Philadelphia via the public bus that ran through our town.

Oh what a grand time we had! The radio surplus stores were virtual museums. We would spend hours visiting the stores, looking at each piece of equipment, some on shelves and others stacked in piles. Some equipment had been used, some with battle scars while others were brand new and in the original box. We would turn the knobs, read the dials and lift the tops to see what was inside, most of this under the watchful eye of a shopkeeper.

At a radio surplus store, unlike a museum, the objects d'art can be purchased for reasonable prices. On one of my trips I purchased a brand-new receiver that covered the frequency of one of the amateur radio bands. This receiver was a fantastic bargain at thirteen dollars which meant that I had to only mow three lawns in order to have this jewel. My friend Don bought a used tank radio. I don't recall the price but we had a logistics problem of transporting the monster on the public bus. Fortunately, the radio had two big handles one on either end intended for two big soldiers. I agreed to support one end of the tank radio and lugged it on the public bus.

The commuter bus is not crowded on Saturday but a middle aged lady, asked what we had. Don said it was a "tank radio". The lady seemed to accept this explanation and asked no further questions. I was hoping the lady would ask why he had a tank radio because I know Don would have told her it was for his tank.

Purchasing surplus equipment is only part of the task of using this equipment. This stuff was made to operate in a tank or an airplane, or perhaps a warship. A lot of modification and construction of power supplies etc. was required to get these things going, but we learned and the old WWII equipment was put to good use.

The radio rows are gone. New York's radio row is now the World Trade Center and there are big office buildings on Arch Street in Philadelphia where the surplus stores once were. The World has changed. My thirteen dollar receiver, which I no longer have, is a collector's item today, particularly if it's unused and in the original box. I don't know what happened to Don's tank radio, but doubt he still has it. Don, like me, went to college, served in the Army, married, raised children and moved several times. The importance of owning a tank radio is something that wives don't understand and is seldom loaded on

the moving van for the first move and never makes it on the van for the second move.

Al Helfrick, Ph.D.



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 \$28, including tax, for S-XL size's, 2XL size is \$4 additional.

For more information or to order shirts contact Allan Jusko 3706 Longford Circle Ormond Beach, FL 32174 386-671-3706 or a.jusko@jeee.org

Indicate shirt size and name and grade if desired. Shirts must be paid for before ordering, typical turn around time is 2 weeks. Arrangements can be made to pick up shirts or have them shipped to you.



DAYTONA SECTION COFFEE MUGS

The Daytona Section has available coffee mugs with the IEEE Daytona Section Logo and are available for \$7.00. Purchase one or more to show you support and pride in our Section.

Contact Roger Grubic at 386-441-8958 or roger_grubic@ieee.org for more information.

EDITORS NOTES The SPARKS newsletter is also available on our website http://www.ieee.org/go/daytona

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Thursday September 26th 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

AGENDA

6:30 PM Cocktails 7:00 PM Dinner 8:00 PM Program **TOPIC** – Methods for encouraging computer literacy and programming skills

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September Dinner Menu

Sicilian Chicken - Chicken Breast lightly breaded in Romano cheese and Panko bread crumbs, topped with red peppers and artichoke hearts in a chardonnay butter sauce

Beef Stroganoff

Fried Shrimp

All entrees served with rolls and butter, house salad, coffee and tea

Unless noted, dinner entrées are \$20.00 each. Students \$10.00 each A Veggie plate is available on request for \$10

Please contact Allan Jusko with your dinner selections or for program information. Dinner Selection's must be in by <u>Wednesday the 25th at noon</u> so the club has time to order and prepare

Allan Jusko SPARKS Editor 386-671-3706 a.jusko@ieee.org

If you make reservations and are unable to attend, call at least 12 hrs prior to the event to cancel