IEEE FOOTHILL SECTION

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Monthly Newsletter

In this Issue

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IEEE Foothill OpCom Meeting

December Operations Committee meeting was held via Zoom on Dec. 8, 2020 attended with 14 Section members. Meeting started with minor corrections on the minutes from previous meeting and was approved. David E. Gonzalez discussed about updates on COVID-19 and our Section Elections; and a run through on the Treasurer's report was made and was approved.

Sections and Committees
For Educational Activities, they are looking for university students and Young Professional volunteers for a one-day science boot camp at Rialto school district. Dr. Osman Ceylan had a meeting with Dr. Kumar Ramajayam from Bytes and Bots and planned on a tour and strategy meetings. There will be two sessions for the Rialto Unified School District. In late April, there will be a 'Teach the Teachers'" and in the beginning of May, a 'Teach the Kids' Science" Bootcamp.

No update on Student Section and Technical Societies and Committees.

Affinity Groups
Callie Howard reported for Women in Engineering. The chapter is working on a possible hackathon and some events to recruit and get people more involved. Young Professionals had a cabinet member on Dec. 5th, planned a virtual game night in January and more events such as networking.

We discussed how we might participate especially focusing on areas of experience. Since Dr. Beatty and Dr. Scott have experience, Dr. Freyne suggested that we prepare a "White Paper" as a draft proposal for some topic (possibly a SBIR announced topic) as an exercise to help understand the process involved. Try to identify the technology areas that would be involved; the work areas that need development. Circulate to the other members of FHCN for review and additions to this white paper.

New Business Incubator
Keith Reno ran for Treasurer as a write-in candidate. PACE matching funds are available for students and YPs for the 2021 IEEE Rising Stars Global Conference in Jan. 2-4, 2021. Next meeting schedules were announced.

IEEE Nano Seminar at Cal Poly Pomona (CPP) 100 Gbps Communication Link

by Nick Massetti

The Joint Foothill/Orange County Nanotechnology Council Chapter and Cal Poly Pomona IEEE presents

Toward 100 Gbps Fully Integrated Wireless Communication Transceivers

With Guest Speaker
Dr. Huan Wang

When & Meeting ID
Tues. Nov 17
12 pm - 1 pm
980 6283 4595

Abstract:
Conventional transceiver architectures encounter serious bottlenecks that limit achievable data rate and posts significant concerns on system cost and efficiency. The state-of-the-art solutions will be presented and discussed first, followed by the proposed way of implementing highly intregrated ultra-high-speed wireless transceivers.

The IEEE Foothill / Orange County Joint Sections Nanotechnology Council (NTC) Chapter and IEEE Foothill CPP Student Chapter held its fourth event on Nov. 17, 2020 online and at Cal Poly Pomona. The keynote speaker was Dr. Huan Wang who recently completed his Doctorate at UCI and is now working at Qualcomm on analog/RF IC design for wireless cellular communication.

Dr. Wang described how his work has led to the design of a wireless communication link capable of 100 Gps with simpler data modulation schemes using lower power. A circuit design fabricated at the sub 100 nanometer scale with Silicon Germanium technology has been completed to demonstrate his results. Much of the circuits operation is in the analog domain taking advantage of the SiGe NPN Bipolar transistor amplifier's very high maximum operating frequency as the key enabler. This breakthrough promises to streamline data centers by replacing lower speed high energy consuming wired interconnects with low power high speed wireless transceiver links.

The audience included many CPP students who said they had gained valuable information from this event. The event was held on Zoom with 35 attendees and hosted by Adrian Alarcon, President of the IEEE Student Chapter.

The chapter has its own IEEE listserv distribution list now including 100 addresses. Join the chapter list at https://listserv.ieee.org/cgi-bin/wa?A0=IEEESOCALNANO. Past events hosted by the NTC chapter can be found at its website at https://ieee-region6.org/socal-nano/.

Chapter organizer Cal Poly Pomona Professor Jenny Yu invited all to attend the next event which will be held in the Spring of 2021.

SET Congressional (Virtual) Visits Day

by Arthur W. Sutton

Usually in the spring legislators' office buildings in Washington would have lots of organizations having a legislative or lobby day with lots of members of the organization visiting their legislators' offices.

IEEE is one of those organizations and Foothill Section has had participants.

There will be no roaming in Washington this year because of COVID, but this gives us an opportunity for more of us to easily participate in this years IEEE legislative program.

It is very easy. Contact to sign up for the virtual training day and the virtual visits.

Foothill Section spans many legislative districts and we need people from each of them.

You can make a difference.
Visit https://ieeeusa.org/advocacy/cvd/.
We need you.

IEEE & IEEE Foothill Events

IEEE COMSOC - 2020 North American Board Regional Regional Chapter Chairs Congress
Dec. 5-6, 2020

IEEE Foothill ExCom Meeting
Dec. 14, 2020

2021 IEEE Rising Stars Global Conference
Jan. 2-4, 2021

IEEE Foothill Consultants Network Meeting
Jan. 6, 2021

IEEE Foothill Young Professionals Game Night
Jan. 6, 2021

IEEE Foothill Operations Committee Meeting
Jan. 12, 2021

IEEE SUSTECH-TALKS #3:
GIS - MAPPING THE WAY TO A SUSTAINABLE WORLD - A DIGITAL TRANSFORMATION
Jan. 26, 2021

Upcoming Events

Monthly IEEE Foothill Operations Committee (OpCom) Meeting
Feb. 9, 2021 6:30-9:30 PM
https://csusb.zoom.us/j/94885680224

Webinar: OPENBOT: INTEL LABS PROJECT OF AN OPEN SOURCE ROBOT CREATED AROUND AN ANDROID PHONE
Feb. 10, 2021 12:00-1:00 PM
Register: https://events.vtools.ieee.org/m/259532

DESIGN AND ANALYSIS OF CHIPLET INTERFACES FOR HETEROGENEOUS SYSTEMS
Feb. 11, 2021 12:00-1:30 PM
Register: https://events.vtools.ieee.org/m/252881

23TH BME BIO-TECH CONTEST
Feb. 13, 2021 10:30 AM-12:30 PM
Register: https://events.vtools.ieee.org/m/257353

IEEE Computer Society Phoenix Chapter : Dark, Deep and Political on the Internet
Feb. 17, 2021 6:00 PM – 8:00 PM
Register: https://www.eventbrite.com/e/dark-deep-and-political-on-the-internet-tickets-138016508091

IEEE CENTRAL COAST EVENT:
Dr. Kerem Camsari Presents "Understanding Quantum Computing Through Negative Probabilities"
Feb. 17, 2021 6:30-8:00 PM
Register: https://events.vtools.ieee.org/m/259756

IEEE SUSTECH-TALK #4:
GREEN ECONOMY AND WHY CYBER SECURITY IS SO IMPORTANT by David Gonzalez
Feb. 17, 2021 6:00-8:00 PM
Register: https://events.vtools.ieee.org/m/259748

IEEE Foothill Young Professionals Workshop
Feb. 27, 2021 7:00-9:00 PM
https://discord.gg/NszurZgSBe