



IEEE FOOTHILL

Monthly Newsletter

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Panatron
Inc.

This Newsletter is brought to you by:

December ExCom/OpCom Monthly Meeting

Prepared by: Max Cherubin

The December ExCom/OpCom meeting was held via BlueJeans, and the meeting officially started at around 7:04 pm with an open remark from the chair regarding the in-person meeting. The chair decided to postpone it due to the rising case of the

New COVID variant. Face-to-face may be possible later February or earlier March, depending on the case of the said new COVID variant.

Jerry and Osman were assigned to prepare for the Foothill Section election. The probable date for the open nomination is on December 17th, and solicitation of nominations is until January 7th then, the election will start as well. The election will process through February 7th, and at the next ExCom/OpCom meeting in February, the winners will be announced.

Section and Committees

For Membership Development, we have 52 new members, growing from 960 to 1012. Our new senior member is Regev Nir. Kim sent 43 new members the Welcome letter last November 28th.

For Social Media and Websites, last month we hit almost 1000 visitors on our webpage, and this month it dropped back to 284 again. So it seems that our average is around 300. We only had one new member on Facebook.

Student Chapters

For Student Chapter, out of 5 universities there were only two who reported. One from UCR and the other one is from DeVry University.

Chloe Georgiou, the treasurer from UCR, reported that they plan to have general meetings in person, but that could always be a subject for change. Their other project meetings will most likely be held online.

DeVry University had a workshop on the topic of Raspberry Pi, and it was conducted by Prof. Alex Leung last Dec. 10th, 2021, which Prof. Nazila Safavi reported.

Technical Societies and Committees

MTT so far had 3 Distinguished Microwave Lectures planned for 2022. Those include those away from Georgia Tech talking about a power amplifier design. Scott is hoping those who could attend the Microwave Distinguished Lecture this year saw the high-level quality of these talks. The challenge is always looking for more participation from the Ed CAS and AP section members.

Nanotechnology Council successfully held their event with IEEE Foothill Orange County, on the topic of how Nanotechnology can be used with respect to COVID-Prevention, Detection, and Therapy.

Dr. Omar focuses on areas about 5G and 6G wireless networks. He's also thinking about working on things like software defined networks and software defined regions. There is also the area of A.I. and machine learning which is very active nowadays in relation with communication systems.

YP will have two members to attend the Rising Stars 2022, and they are planning to have a meeting this month.

Cash Sutton reported that the Consultant's Network had their last meeting for this year last October 27th. They'll resume back by January.

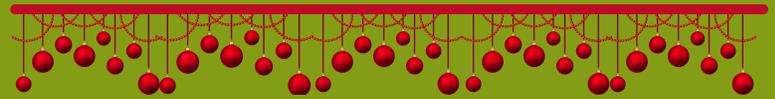
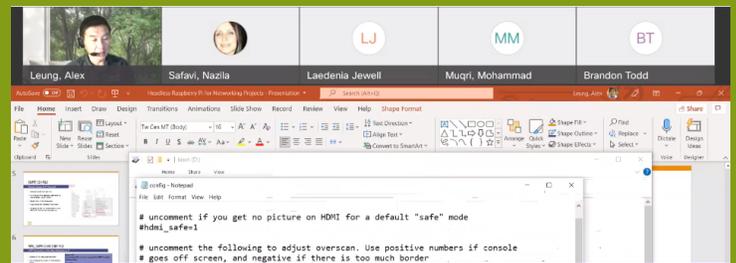
Headless and Virtual Raspberry Pi

By: Prof. Alex Leung

On December 10, 2021 Prof. Alex Leung did a talk about Raspberry Pi. It is a credit card sized Linux based computer developed in the United Kingdom by the Raspberry Pi Foundation and Broadcom. The original goal was to promote an affordable computer platform for teaching computer science and providing hands-on experience to students. Due to its small size, low cost, and open-source software and design, it became extremely popular for electronics, computer, and IT enthusiasts.

Raspberry Pi can be used in many projects, including electronic devices, sensors, security systems, etc. In some cases, Raspberry Pi can be situated in difficult-to-reach locations. It is almost impossible to connect monitor and input devices directly to communicate with the Raspberry Pi computer. To access Raspberry Pi for management or configuration purposes, we may need to use a wireless network connection through remote terminal emulation to access the operating system. One of the cost-effective ways is to run virtual Raspberry Pi. Of course, before any configuration changes or software deployments, it would be good to test and gauge the performance in a virtual environment.

This presentation/workshop will focus on using terminal emulation tools, such as SSH and VNC, from a Windows OS computer to create a headless (screenless) Raspberry Pi connection through a Wi-Fi Network. We will also discuss how to run Raspberry Pi Desktop within the Virtual Box.



Nanotechnology to Combat COVID:

Prevention, Detection, and Therapy

By: Jenny Yu

On November 17th, 2021, the IEEE Foothill & Orange County Joint Sections Nanotechnology Council (NTC) Chapter's 17th Annual Fall Symposium titled "Nanotechnology to Combat Covid - Prevention, Detection, Therapy." Up to 57 attendees heard from six presenters in an online forum about how nanotechnology is at the forefront of combating COVID and how lipid nanoparticles are essential components of the mRNA vaccines that have been developed. The academic and industrial presenters described path-breaking nanotechnology-based work focused on addressing the treatment of COVID-19. Among the topics covered were the use of nanotechnology to manufacture COVID mRNA vaccines, the creation of novel nanomaterial decoy therapies, the enhancement of the molecular detection of viruses, and the simulation of nanostructured COVID proteins. The event provided opportunities for attendees to network and actively engaged with the speakers. The local Southern California Nanotechnology Council Chapter helped promote the event through IEEE e-notice, the e-Lynx events calendar, and the university classes.

ClasTech 2021

ClasTech 2021 was held last November 12th 2021 at Common Space Brewery.



Updates and Upcoming Events



Rising Stars 2022



The Rising Stars 2022 will be held in Tropicana Hotel and Resort in Las Vegas on January 4-6, 2022. Good news because the registration fee is now \$75 for an in-person attendee and \$100 for a non-member attendee. They are doing a \$100 for matching funds per attendee for travel expenses up to \$500 per section just so more teams can support their attendee/s. If you had people attending and already paid for the registration before the fee was adjusted, they would be getting a refund to match the new prices.

See you there!!!

WTS 2022 Update



They are currently seeking or soliciting interested industry and ex-pats or industry players to support the conference in terms of providing presentations. They have multiple forms, which were done through the conference sessions. They had tutorials, panel discussions, workshops. There are various topics that the conference is concentrating on, and it's a wide range of issues. The event will be held for three days. The first-day scheme is more like electrical and computer engineering. It's more of an IEEE topic, and we need to have at least one panel or workshop and maybe some presentations from the audience. Again call for papers deadline is on January 10, 2022.

Upcoming Events:



- **January ExCom/OpCom Monthly Meeting**

January 11, 2021

- **Consultants Network Meeting**

January 26, 2021

Social Media:



<https://www.facebook.com/ieeefoothill>



<https://www.linkedin.com/groups/13516173/>



Happy New year!!!

