

IEEE CTS July 2020 Newsletter

Message from the Chairman

Time for me to get behind the wheel and start my professional commute life. TXState starts in-person classes come July 6th and that is also when my next class starts up. My plan is a mixed mode one where students can come to the lecture in person but alternately [and in addition] I'll be webcasting it and saving it for the students review. [Y'all are welcome but I imagine the first course in Electronics isn't all that attractive!] Many of us know that the IEEE provides Web Conferencing capability when requested for appropriate meetings; I will be encouraging Technical Society leaders to use this opportunity and work to arrange meetings that we can attend remotely. I attended last month one of the regular webinars offered by the Electron Devices Society and plan to forward the invitation to the CTS members to encourage them to check it out and to find if a more direct/local invitation will encourage participation. Watch the Analog and the mid-month Newsletter for notices of meetings to come although they can be viewed on vTools Events at your leisure.

As is my habit - I would like to highlight three of the meetings held in the last month:

A: June 16-25: IEEE PI2 Austin, June 2020 Workshop on Energy Storage

The Workshop went virtual - - 4 excellent lectures spread over four days. Targeted learning and you didn't even need to leave work/home!

Agenda

Tuesday, June 16: **David Hood (Saft)** Battery technology comparison and sizing concepts.

Thursday, June 18: **Daniel Youngs (Saft)** Introduction to lithium-ion batteries.

Tuesday, June 23: **Thomas Domitrovich (Eaton)** NEC for energy storage systems, Article 706.

Thursday, June 25: **Thomas Domitrovich (Eaton)** NEC for energy storage systems, other related Articles.

B. June 12th: Virtual Distinguished Lecture on: "Disruptive Technology Adoption and Acceleration in building Smart Cities" - - Fawzi Behmann

Layers of smartness—using technology and data—are being built into cities to make them safer, more efficient and sustainable. Developed cities around the world are actively launching smart solutions, while new and emerging cities are integrating intelligent, connected systems from the start. The big cities of today may not be those of tomorrow. The opportunities are immense—across infrastructure, mobility, energy, healthcare and beyond. Innovative technology applications and their adoption in society offer a turning point. At its core, the smart city is about people and improving the quality of our everyday lives. The COVID-19 pandemic has revealed some of the shortcomings of major cities in times of crisis.

Among the key challenges of Smart Cities: - Disruptive technologies enable building solid foundation for smart cities - highlights of current and future of IoT, 5G/6G, Analytics (AI/ML/DP) across key markets - Examples – technology convergence & adoption in new use cases - Covid-19 accelerate return to new norm with greater innovation, and end-to-end services. Leading to the conclusion that adoption of disruptive technologies and acceleration to a new norm will help transition to smart societies.

C. 23 June: IEEE PI2 Austin, June 2020, Tech Meeting, "Distributed Residential Generation "

Scott Hinson shared information learned from the Austin SHINES energy storage program in the first portion of his presentation. Given current events and the work Pecan Street has done analyzing the shifting residential energy usage patterns, Scott also planned to spend the second half of the talk presenting trends due to the impacts of COVID on Residential Energy usage.

A special note I'd like to make: Our Editor, Prof. Semih Aslan, is proposing to include a special, general-interest, technical note feature to reward you for making it all the way through! We would welcome your feedback both on the relative interest in this sort of technical treat and also if you would have a short note that might be of interest to include. Please also submit any other articles or tutorials you want to share with us.



Message from the CTS Chairman
Chairman, IEEE Central Texas Section
Larry Larson
Larry.Larson@ieee.org

A. 2020 Highlighted Events

The Central Texas Section is building a program of excellent events into the Summer of 2020. In this message I intend to highlight a few of these for your consideration. Pay attention to this and the mid-month Newsletter as more events are being booked each week.

21 July 2020 at 6:30: IEEE CTS LIFE MEMBER and CTCN Joint Meeting - 5G Internet - - Brian Kelly

<https://meetings.vtools.ieee.org/m/233339>

5G-Digital services represent the essential evolution of the modern Internet-driven economy. In simplest terms, 5G high-speed causeways enable ubiquitous access and connectivity to internet-connected services, sensors, drones, robots, and data as we move. Within the research community, 5G technology also represents transformative internet technology at the intersection of high-performance computing, high-speed networking, and high bandwidth wireless communications. This “5G-mobile-internet” allows the computing devices that we carry around to analyze vast quantities of information for real-time services in highly mobile scenarios. This

presentation describes the 5G Internet, associated technology, and the 5G applications that will transform society.

28 July 2020 at 6:30: IEEE PI2 Austin, July 2020, Tech Meeting, "Commercial Lighting Controls – The Path to Code Compliance and an Amazing User Experience" - - Douglas Brown

<https://meetings.vtools.ieee.org/m/234186>

Say farewell to your toggle switches! The future is here and like so many other things, lighting is becoming automated. Driven by government mandated energy programs, lighting control requirements are becoming more stringent but also more useful. During this presentation you'll learn about the why and how of lighting controls as well as a look at what the future may have to offer.

Membership Development

Continuing Education the IEEE Resource Centers

The IEEE Resource Centers contain valuable, peer-reviewed technical content from reputable experts to enhance research or industry work, implement trainings, or earn CEU/PDH credits--all of which is universally available on demand.

IEEE Resource Centers benefits include:

- Access to valuable IEEE Society and technical community content
- Access to content 24 hours a day, 7 days a week through an easy-to-use global portal
- Valuable, peer-reviewed technical products available at little or no cost
- Opportunities to earn CEUs and PDHs
- Enhanced value of IEEE Society membership
- Most technical content available at no cost for Society members in their respective Resource Center

Check out the [IEEE Resource Center](#)

Not an IEEE member and have been waiting to join?

We are at the ½ way point of the year, which means that any friends who are interested in joining IEEE or rejoining after at least 2½ years out of IEEE can join for ½ price. Encourage them!

Senior Membership Upgrade

We have some new Senior Members from the June A&A Panel meeting: **Edwin Piner, Gagan Aggarwal, Shayne Short, Garth Dabreu, and Jaeweon Kim**. Also elevated was **Ahmad Abdullah**, formally of CTS, now relocated to San Antonio. Congratulations to each of these esteemed members.

Do you think you might qualify for IEEE Senior Membership? Don't wait! Contact James Mercier, P.E. at jmercier@ieee.org He will guide and nominate you. The deadline for the August cycle is July 29, so contact James today.

James J. Mercier, P.E.

CTS Membership Development Chair

jmercier@ieee.org

512 971-1974 (You may need to leave a message)

Monthly Tutorials: Image Processing with OpenCV Python

https://github.com/IEEECTX/July_2020_Image_Processing_with_OpenCV_Python

<https://github.com/IEEECTX/>

IEEE CTX July 2020 EVENTS

Listed below are the IEEE Central Texas and Lone Star Sections/Chapter events/activities/meetings scheduled for **November**. For detailed information on the Central Texas and Lone Star Sections, please visit website at:

<https://r5.ieee.org/ctx/>

CTS Event list please click here (<https://bit.ly/3atwQSK>)

09 July 2020 12:15PM	IEEE PI2 Austin, July 2020, ChapComm, Officers Meeting	
10 July 2020 06:00PM	UT Austin IEEE TEMS Graduate student chapter - Postdoc Quest series talk	Dr.Deepyanti Taneja
20 July 2020 06:30PM	CTS WIE Virtual Meeting. Increase your Productivity! Work from Home! Redux!	
20 July 2020 06:30PM	CTS Education Society Virtual Meeting. Increase your Productivity! Work from Home! Redux!	
20 July 2020 06:30PM	CTS TEMS Virtual Meeting. Increase your Productivity! Work from Home! Redux!	
21 July 2020 06:30PM	IEEE CTS LIFE MEMBER And CTCN July 21 Joint Meeting - 5G Internet	Brian Kelly
28 July 2020 06:30PM	IEEE PI2 Austin, July 2020, Tech Meeting, "Commercial Lighting Controls – The Path to Code Compliance and an Amazing User Experience"	Douglas Braun

IEEE Conference Search can be found at

<http://www.ieee.org/web/conferences/search/index.html>

Click on the quick links below to take advantage of the online

services offered by the IEEE:

* Membership Portal

<http://www.ieee.org/myieee>

* Renew your IEEE membership

<http://www.ieee.org/renewal>

* Research with ease with the IEEE Member Digital Library

<http://www.ieee.org/iecemdl>

* Access IEEE Xplore, the online delivery system

<http://www.ieee.org/ieeexplore>

* Explore technology at IEEE Spectrum Online

<http://www.spectrum.ieee.org/>

* Establish a FREE @ieee.org e-mail alias

<http://www.ieee.org/alias>

To unsubscribe from the CTS-SECTION list, click the following link: <https://listserv.ieee.org/cgi-bin/wa?SUBED1=CTS-SECTION&A=1>