

## June 2020 Newsletter

### Message from the Chairman

OK, things are starting to open up now; I'm seeing more cars as I go off on my walks but I personally have a break from classes and am effectively in "Shelter-at-home" mode simply as I don't need to go out. That will pass soon as TXState starts in-person classes come July 5<sup>th</sup> and that is also when my next class starts up. It will definitely feel like a new world then! 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 am curious about 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 months:

**A: May 27<sup>th</sup> - IEEE CTCN and Life Member Joint Virtual Meeting - New Start Up Idea and Company to Improve Thermal Ablation of Tumors - - Thomas Ryan**

Thermal ablation of tumors through the skin and into liver or kidney is in widespread use daily. A medical start-up created a novel gel that is injected next to the tumor that changes the dielectric properties such that microwaves or RF are more effectively absorbed and the ablation volume is markedly increased. This should lead to more effective treatment since often all of the tumor is not ablated with the treatment which could lead to regrowth of the cancer. The technology could also be used for cardiac ablation and other sites.

The talk gave a short tutorial on tumors, thermal ablation, and access to the tumor, including an animation. Following this introduction, it proceeded to go over the market potential, and development and commercialization plans of the start-up. The audience were the hypothetical Angel investors and discussed afterward whether they would fund or not and their reasons for doing so. Angel investors invest their own money, so they scrutinize (in great detail) all the start-ups that pitch to them.

**B: May 19<sup>th</sup> – Virtual Meeting: IEEE CTCN and Life Members Joint Web Ex Meeting - Edison vs Tesla: When IP ruled ... still does - - Dr. Edwin De Angel of Invention Matters**

Tales of two of the greatest engineering minds. From Edison vs. Tesla to Apple vs. Qualcomm. Why inventor technical breakthroughs fail to become successful businesses. In a world where innovation is not confined by geographic boundaries intellectual property (IP) has become a game changer. All patents are not created equal: good patents vs. bad patents. From engineer to subject matter expert.

**C: May 18<sup>th</sup> - Virtual Meeting : CTS WIE, TEMS, YP and EdSoc: Career Night – Networking Opportunity**

**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.

Message from the CTS Chairman  
Chairman, IEEE Central Texas Section  
Larry Larson  
[Larry.Larson@ieee.org](mailto:Larry.Larson@ieee.org)

**A. 2020 Highlighted Events**

The Central Texas Section is building a program of excellent events into the Spring 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.

**B. June 12<sup>th</sup>: Virtual Distinguished Lecture on : “Disruptive Technology Adoption and Acceleration in building Smart Cities” - Fawzi Behmann <https://meetings.vtools.ieee.org/m/2s31720>**

Abstract: 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.

Intro: Current state and 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
- Key examples – technology convergence & adoption in new use cases
- Covid-19 accelerate return to new norm with greater innovation, and end-to-end services

Conclusion: Adoption of disruptive technologies and acceleration to a new norm will help transition to smart societies.

### **C. 15 June: CTS WIE, TEMS, YP and EdSoc: Family Night! Engineering Challenge: Marble Run**

<https://meetings.vtools.ieee.org/m/218648>

Join us for Family Night and Engineering Challenge! We'll have a unique opportunity to team up and take on the challenge to build a Marble Run. Bring your friends and families. We'll have fun and prizes. And we'll learn some lessons about team coordination.

Join us for great food and drinks, good company and a fantastic discussion. No charge for this event! Bring your friends! And make new ones!

### **D: June 16-25: IEEE PI2 Austin, June 2020 Workshop on Energy Storage**

The Workshop is going virtual!! - - See the details at <https://meetings.vtools.ieee.org/m/221515>

## Agenda

Tuesday, June 16, 1-3:30 PM: **David Hood (Saft)** Battery technology comparison and sizing concepts.

Thursday, June 18, 1-3:30 PM: **Daniel Youngs (Saft)** Introduction to lithium-ion batteries.

Tuesday, June 23, 1-3:30 PM: **Thomas Domitrovich (Eaton)** NEC for energy storage systems, Article 706.

Thursday, June 25, 1-3:30 PM **Thomas Domitrovich (Eaton)** NEC for energy storage systems, other related Articles.



Chairman, IEEE Central Texas Section

Larry Larson

[Larry.Larson@IEEE.org](mailto:Larry.Larson@IEEE.org)

Message from CTS Chairman

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### **Did you know about IEEE**

IEEE Young Professionals - IEEE Young Professionals is the group of IEEE members and volunteers who have graduated from their first professional degree within the past 15 years. It is an international community, whose members are interested in elevating their professional image, expanding their global network, connecting with peers locally and giving back to their community. Since it encompasses all members from recent university graduates to experienced professionals and entrepreneurs, the group is highly diverse in what it has to offer. To join the IEEE Young Professionals community, you need to be an IEEE member.

Find out more about IEEE Young Professional activities and how you can become a part of the dynamic group. See [yp.ieee.org](http://yp.ieee.org)

### **Senior Membership Upgrade**

Well folks, the cutoff for getting your Senior Member Upgrade Application submitted is June 10 for this cycle; in other words, about the time you are reading this article. (*sigh*) And you were so hoping.

Not to worry! The next cycle is next August, so there is plenty of time to work on the Application for that cycle because the cutoff is the end of July. However, please *don't* wait until July. Contact the CTS Senior Member Upgrade Coordinator, James Mercier, P.E., **now!** Email him your resume or CV as a pdf and include your IEEE membership number. James will tell you what all he needs after that to make *sure* your application gets approved. No, it is not influence; yes, it is information preparation!

And, yes, you *can* apply on your own, but ...

By going through James, you will get the necessary reviews and guidance on wording and order. James will make sure that what you submit will make sense to the A&A Panel members, not just to you. (A common problem in writing is that *we know* what we are saying, but does the reader?)

Plus, James will supply the references for you, track them to see that they have done so, and help them if necessary. Once in his hands, you won't need to worry.

So, go ahead and email James at [jmercier@ieee.org](mailto:jmercier@ieee.org) He's waiting to help.

James J. Mercier, P.E.  
CTS Membership Development Chair  
[jmercier@ieee.org](mailto:jmercier@ieee.org)  
512-971-1974 (You may need to leave a message)

## Monthly Tutorials: Basic Encryption and Decryption using Python

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

## IEEE CTS/LSS June 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>)

|                         |   |  |
|-------------------------|---|--|
| 03 June 2020<br>07:30AM | <a href="#">IEEE CTS Monthly Conference Call</a>  |  |
| 11 June 2020<br>12:15PM | <a href="#">IEEE PI2 Austin, June 2020, ChapComm, Officers Meeting</a>  |  |
| 12 June 2020<br>11:30AM | <a href="#">Virtual Distinguished Lecture on : “Disruptive Technology Adoption and Acceleration in building Smart Cities”</a>                                 |  |
| 15 June 2020<br>06:30PM | <a href="#">CTS WIE, TEMS, YP and EdSoc: Family Night! Engineering Challenge: Marble Run</a>  |  |
| 16 June 2020<br>01:00PM | <a href="#">IEEE PI2 Austin, June 2020 Workshop on Energy Storage</a>   | Thomas<br>Domitrovich, P.E.<br>and<br>Dan Youngs &<br>David Hood |
| 16 June 2020<br>06:30PM | <a href="#">IEEE CTS LIFE MEMBER And CTCN Jun 16 Joint Meeting - So, You Wanna Rewire Your House, Huh?</a>  | James Mercier  |
| 23 June 2020<br>06:30PM | <a href="#">IEEE PI2 Austin, June 2020, Tech Meeting, "Distributed Residential Generation "</a>   | Scott Hinson   |
| 24 June 2020<br>06:30PM | <a href="#">IEEE CTS LIFE MEMBER and CTCN Jun 24, 2020 Joint Web Ex Meeting - Energize Your Mindset: 8 Tips for Moving On From the COVID-19 Alligator Pit</a> | Carrie Vanston   |

24 June 2020 [IEEE CTCN and Life Member Joint Meeting - June 24, 2020 - Energize Your Mindset: 8 Tips for Moving On From the COVID-19 Alligator Pit](#) Carrie Vanston  
06:30PM

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<https://r5.ieee.org/lonestar/>  
LSS Event list please click here (<https://bit.ly/2VJWSNs>)

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|-------------------------|---|----------------------|
| 03 June 2020<br>04:00PM | <a href="#">Lone Star Section Executive Committee Meeting</a>                         |                      |
| 13 June 2020<br>08:00AM | <a href="#">Lone Star Section Planning Meeting</a>                                    |                      |
| 18 June 2020<br>11:30AM | <a href="#">IEEE Life Members Affinity Group June Meeting - In Person and Virtual</a> | T. Scott<br>Atkinson |
| 25 June 2020<br>06:00PM | <a href="#">Power Electronics Applied to Grid Resiliency</a>                          | Bill Ryan            |

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IEEE Conference Search can be found at  
<http://www.ieee.org/web/conferences/search/index.html>

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