

November 2019 Chairman Corner

## **(02) EDITORIAL Corner**

The Central Texas Section made strong contributions in October and first of November, and preparing remaining activities for November/December 2019.

Along with regular chapter and affinity group meetings, the November 2019 Editorial Corner provides a special coverage of CTS key events that took place: IEEE Day events, the Texas Technical Tour and the IEEE Smart Cities Summit. Looking forward to close out the year, the first Student Branch Conference connecting five campuses is scheduled for mid November, financial planning & proposed scope of activities for 2020 is scheduled for completion by the end of November, as is the process of holding chapter elections. 2019 will close with various appreciation networking events and a Year-End CTS Appreciation Dinner.

**IEEE CTS Chairman  
Fawzi Behmann**

## **EDITORIAL Corner**

IEEE CTS Chairman  
Fawzi Behmann  
[f.behmann@ieee.org](mailto:f.behmann@ieee.org)

### **A. IEEE DAY**

2019 IEEE Day's theme was: **"Leveraging Technology for a Better Tomorrow"**.

Central Texas Section conducted several events celebrating the day. The number and variety of programs demonstrate the strength of IEEE chapters and affiliations in Central Texas:

#### **October 8**

Event theme: IEEE Day Networking & 5G Events. IEEE CTS Austin YP - Young Professional, MTT - Microwave Theory & Techniques, APS – Antenna Propagation Systems, and IM - Instrumentation & Measurement, sponsored the event. The event went well, with good turnout. The event was coordinated by Jose Luis Lacavex, and supported by Casey Latham

#### **October 9**

Event theme: IEEE Day – Smart Cities. Two special presentations:

- **"Moving beyond pilot projects for smart cities: A look at Austin's smart city projects"**. The presentation was made by Maggie Shillington, senior analyst on the Internet of Things (IoT) and Smart Cities research team, IHS Markit.
- **"Leveraging content from Smart City Summit"**. Fawzi Behmann, Chair, 2019 IEEE Smart City Summit (SCS) made the presentation. The event was coordinated by Fawzi Behmann, chair of IEEE CTS Austin ComSoc & Signal Processing, Computer & EMBS Joint Chapters

### **October 17, 6-8pm**

Event theme: Deep Learning Classification Model for Medical Images using Keras. The talk given by Amy Daali, provided insight on how to leverage Deep Learning techniques in medical applications and more specifically how to use the Deep Learning Model to identify diabetic retinopathy and detect blindness before it happens. The event was coordinated by San Antonio EMBS Chapter.

### **October 21**

IEEE DAY theme: a) Engineering Challenge and b) October Fest celebration. The Engineering Challenge involved young people and students, allowing them to learn (by doing) about the importance of project coordination alongside senior professionals. Discussions included ways to increase creativity and leadership skills by engaging in community events. The event was sponsored by IEEE CTS Austin WIE – Women In Engineering, TEMS – Technology & Engineering Management Society, YP – Young Professional, EdSoc – Education Society and coordinated by Leslie Martinich.

## **B. IEEE Texas Technical Tour**

### **October 9-19, 10-day**

Contributed by Garrett Polhamus

The IEEE 2019 Texas Technical Tour just completed its 10-day excursion. The Tour, built around the IEEE Milestones and Stepping Stone Awards in Texas, included visits to technical sites in Houston, San Antonio, Austin and Dallas. Highlights were NASA Houston, the University of Houston superconductivity research center, Rice University's research in robotics and communications, and the Southwest Research Institute robotic full-aircraft paint stripping system and its role in the NASA New Horizons Spacecraft project to observe Pluto and their energy storage research. Other highlights were the San Antonio Museum of Science and Technology, the University of Texas research on power, the Texas supercomputer center and the Texas Instruments IEEE Milestone plaques and their Richardson FAB facility.

There were also some special experiences such as riding the river in San Antonio, dropping in on the Texas Ranger Museum, and first-hand exposure to the Fort Worth Stockyards ....and that doesn't even count all the Texas cuisine on the menu! With over 40 participants from the US, Australia, Japan, Canada, Germany and India, this was a unique exposure to some of the very best Texas has to offer.

During the course of the Tour, the group also met up with many local area Life Members. At the close of the tour some participants even asked about the possibility of more tours in the future; one even asked for an international tour along with tours to the Boston to New York area and Silicon Valley, California. IEEE Central Texas Members should consider hosting future technical tours around Austin, Houston, San Antonio and South Texas. We have lots of very interesting technical, cultural and historic sites. Think 2020!

***Texas Tech Tours***

***October 9-19, 2019***



Arriving to Austin for dinner at Oasis



Being greeted by CTS Chair

## ***Texas Tech Tours    October 9-19, 2019***

Dinner at Oasis



This Texas Technical Tour was organized by: Scott Atkinson (Chair), Garrett Polhamus (Vice Chair), Ernest Franke (San Antonio City Guide), Kai Wong (Austin City Guide), James Brakefield (Chair San Antonio Life Members Affinity Group) and Advisors: Bob Harris, Tom O'Brien, Richard Wiggins, and John Lyons. Additionally Fawzi Behmann and Bill Martino provided assistance from the CTS Leadership. Plus we cannot express our thanks enough to all the folks that provided onsite technical coordination for our Tour to visit their facilities.

### **C. "NEC 2020 Changes" Workshop, Austin**

(PI)<sup>2</sup>, the joint chapter of PES, PELS, IES, and IAS in the Central Texas Section, hosted another successful workshop in October. This 2-day workshop presented and discussed the changes in the forthcoming 2020 National Electrical Code, or NEC. The NEC is updated, or changed, on a 3-year cycle, the 2020 NEC being the latest.

The presenter was Thomas Domitrovich, a Professional Engineer within Eaton Corporation's electrical group and member of Code Panels 2 and 10. As a result, Tom has direct knowledge of what the changes

were as well as the thought behind each of the changes. Thomas relayed these in detail along with real life examples of the problems that initiated those changes.

Some of the changes covered were: Reconditioned electrical equipment; Marinas; Definitions; Maximum number of disconnects; Ampacity tables; Arc-Flash protection; and GFCI protected circuits, to name a few. It was an intense 2 days!

At the close of the workshop, as is usual for (PI)<sup>2</sup>, a drawing was held for the workshop participants to get a chance to win either an AEMC Clamp-on Ground Test meter or a Soares book on Grounding. The Soares book was won by our own Ruth Sulzer, P.E., while Aaron Dennington, P.E. of Encotech Engineering Inc, won the AEMC meter. Congratulations to both Engineers!

The workshop was held in the Historic Austin Scottish Rite Theater with its excellent acoustics and atmosphere for workshops. As usual, this workshop included breakfast tacos, snacks and beverages all days long, and a soft copy of the 2020 NEC as part of the registration. Besides Eaton, our other major sponsor was IBEW Local Union 520. We are very grateful to both Eaton and the IBEW for their support, which allowed us to keep the registration price of the workshop down!

**Tom Domitrovich** is actively involved with various electrical industry organizations and most recently has focused on the continued growth of electrical safety. Mr. Domitrovich is an author with a wide range of trade magazine articles including columns in two industry trade magazines focused on electrical safety. He sits on NFPA Code Making Panel 2 for the continued development of the National Electrical Code (NFPA 70). He is also on the NFPA committee for the continued development of NFPA 73 and chairs various committees for other electrical industry organizations. Mr. Domitrovich is a LEED® Accredited Professional, a licensed Professional Engineer and holds a Bachelor of Electrical Engineering from Gannon University.



IEEE (PI)<sup>2</sup> Austin Chair, Andrew Blueitt, AEMC Clamp-on Ground Test meter raffle winner Aaron Dennington, and (PI)<sup>2</sup> Workshop Chair and Treasurer, James Mercier.

Soares Book Raffle winner, Ruth Sulzer, PE, Center, below



The Workshop - Scottish Rite Theater

## D. 2019 IEEE SMART CITY SUMMIT (SCS), Nov 1, Austin

We are pleased to report that a special 2019 IEEE full day summit was held November 1, in Austin at the Texas Advanced Computing Center (TACC) at J.J. Pickle Research Campus, Advanced Computing Building (ACB, Building 205).

We had over 120 participants from different regions of the US and from out of countries such as Rome, Italy and Namibia, Africa, and remote connections were set up with Guadalajara, Mexico and Athens, Greece.

The participants' profiles represent cities/municipalities, the medical community, industry and startups, as well as professors from multiple universities, researchers and students.

The theme of summit was to examine the effect of disruptive technologies on potential innovative use cases for Smart Cities, Mobility and Healthcare. Disruptive technologies being considered include IoT, 5G, and analytics AI/ML/DL.

**As commented by many, the summit was a great success and was of high quality reflecting the commitment, dedication and sacrifice by many. The event included a host of talented and skillful speakers, exhibitors, organizing committee & advisory committee and host of dedicated volunteers.**

**The 3 keynote speakers were outstanding and the three panel sessions brought the best from domain experts in the areas of mobility, healthcare and smart cities.**

The summit succeeded at deepening understanding, fostering a forum for dialog and collaboration, and defining actions needed to accelerate the adoption and deployment of disruptive technologies into key market segments within Smart Cities.

A Special 'THANK YOU' goes to

- The Advisory Committee with their timely advice and industry connection.
- The Organizing Committee with their commitment, dedication and sacrifice in helping putting the program, sharing info real-time on the website, registration, local arrangement, collaboration with TACC, Food & Beverage, Finance, etc.
- The dedicated volunteers that stepped-in offering quality services to ensure the operations are gone smoothly and help provide right environment for attendees to have a memorable experience.
- Thanks to all the 3 keynote speakers for giving us a visionary perspectives of the future empowered by disruptive technologies.
- Thanks to the three session chairs on (smart cities, mobility and healthcare) and the distinguished panelists who provided colorful and real examples.
- Thanks to the heart-to-heart Executive Recap session and the great demos/showcase and networking concluding the summit.

We appreciate the professional collaboration IEEE has with TACC and for the continued support from Dr. Dan Stanzione hosting the summit and the support provided by his team.

### **The program included:**

#### **8:30 – 9:00am : Introduction and Welcome**

- Fawzi Behmann , Chair, 2019 IEEE Smart City Summit and President TelNet Management Consulting Inc. Fawzi opened the conference and articulated on the value proposition of the summit and differentiation being brought by IEEE-based events. He provided an outline of the program and invited the audience for engagement and leverage networking opportunities during breaks, lunch and showcase & reception.
- Stephen Elkins, CIO of the city of Austin welcomed the attendees on behalf of the city and the mayor and articulated on the challenge that Austin is facing
- Dr. Dan Stanzione, Associate Vice President for Research at The University of Texas at Austin and Executive Director of the TACC, is a nationally recognized leader in high performance computing. Dan extended a warm welcome to TACC highlighting the value of the institute, collaboration with IOEEE and extended offering technical tours to some of the top 5 high performance systems in the world.
- Tom Coughlin, President of IEEE USA and President, Coughlin Associates. He spoke on "Smart Cities and Public Policy" describing efforts by IEEE with collaboration from many societies working on Future Direction initiatives develop the technology that enables the Internet of Things and powers Smart Cities.

#### **9:00am : Keynote #1**

Patricia Florissi, Vice President and Global CTO for Sales, Dell/EMC

#### **Title: "Digital Cities: Ready or not, here they come"**

To many, AI still remains a research pilot or a workload only cloud-native companies, such as Netflix, can effectively execute upon. In reality, AI is becoming ever more pervasive and ever-more mission critical. Take autonomous driving as the killer app of this decade, driving digital cities to become one of the next.

In this talk, we'll discuss several architectural patterns innate to the anatomy of AI-enabled, cloud-native digital cities.

### **9:30 – 11:00am : Session 1 “ Smart Cities”**

Highlight advancement and disruptive technologies such as IoT, 5G, Analytics, Blockchain and security and their impact in building smart cities. Provide a set of use cases and potential challenges.

#### ***Co-Chairs/Panelists:***

- Joel Myers: CEO at DOMILA Limited (Ireland)
- Rebecca Hammons: Associate Professor, Ball State University
- Chelsea Collier: Founder, Digital.city
- Stephen Elkins: CIO at City of Austin
- Konstantinos Champidis: Chief Digital Officer at City of Athens
- Victor Larios: Professor Researcher at Universidad de Guadalajara, CUCEA Smart Cities Innovation Center

### ***11:00 – 11:30am : Break & Networking***

#### **11:30am : Keynote #2**

John Cole, Founder of SkyTran

#### ***Title: “Smart Infrastructure for Smart Cities”***

Elevated guideway transport networks like skyTran can serve as much more than a transportation system. They can be the infrastructure on which people, freight, power and data move with unprecedented efficiency and reliability.

### ***12:00 – 1:15pm : Lunch***

#### **1:15 – 2:45pm : Session 2 “Mobility and Autonomous Vehicles”**

Explore transformation from ADAS-Advanced Assisted Automated System to Full Autonomous Vehicles with AI/ML for mobility and last mile.

Chair/Panelists:

- Stan McClellan, Professor and former Director of Texas State University
- Dharm Singh, Professor of Computer Science at Namibia University of Science and Technology (NUST)
- Adam Drobot, Chairman of the Board, OpenTechWorks, Inc.
- Eric Thorn, Manager R&D at Southwest Research Institute
- Darran Anderson, Director of Strategy and Innovation for TxDOT
- Al Mok, *Professor Quincy Lee Centennial Professor in Computer Sciences*

#### **2:45pm : Keynote #3**

David Atienza, Associate Professor of Electrical and Computer Engineering and head of the Embedded Systems Laboratory at EPFL, Switzerland.

#### ***Title: “Ultra-Low Power Wearables Systems: The Quest for Brain Efficiency”***

Smart wearable devices are poised as the next frontier of innovation in the context of Internet-of-Things (IoT) to be able to provide personalized healthcare by interacting also with everyday objects. This new family of smart wearable devices provides a great opportunity for the next-generation of artificial

intelligence (AI) based medical devices. However, major key challenges remain in achieving this potential due to inherent resource-constrained nature of wearable systems, coupled with their (in principle) limited computing power and data gathering requirements for Big Data medical applications, which can result in degraded and unreliable behavior and short lifetime. This new trend of smarter wearable architectures will need to combine new ULP multi-core embedded systems with neural network accelerators, as well as including energy-scalable software layers to monitor medical pathologies by event-driven monitoring.

### **3:15 – 3:30pm : Break & Networking**

### **3:30 – 5:00 : Session 3 “Healthcare”**

Explore transformation to smart health and wellness. Diagnosis, treatment and prevention. Smart hospitals/tele-health/Telemedicine and personalization.

#### **Chair/Panelists:**

- Sani Nassif, CEO at Radyalis
- Amy Daali, Founder and CEO - Lucea AI
- Jean Anne Booth, CEO - UnaliWear
- Semih Aslan, Assoc. Professor, Ingram School of Engineering, Texas State University
- Heena Rathore, Visiting Professor at Texas A&M University
- Roozbeh Jafari, Associate Professor - Texas A&M University

### **5:00 – 5:30 : Executive Panel Recap**

Recap of the technology & use cases discussed and impact on key use cases. Describe rational pushing autonomous vehicles vs. personalized healthcare. What areas need to be addressed in future events.

#### **Co-Chairs/Executive Panels**

- Fawzi Behmann, President, Telnet Management Consulting Inc.
- Adam Drobot, Chairman of the Board, OpenTechWorks, Inc.
- David Atienza, Associate Professor of Electrical and Computer Engineering and head of the Embedded Systems Laboratory at EPFL, Switzerland.
- Joel Myers: CEO at DOMILA Limited (Ireland)
- Rebecca Hammons: Associate Professor, Ball State University
- Stephen Elkins: CIO at City of Austin
- Stan McClellan, Professor and former Director of Texas State University
- Sani Nassif, CEO at Radyalis

### **5:30 – 6:30 : Showcase and Networking**

#### **Participants:**

- NI
- Samsung
- Texas State
- UT-Austin
- Housing Authority
- TACC
- ArtFrog Art Academy
- Texas State – Sr. Design

A special appreciation dinner was held afterward.



2019 SMART CITY SUMMIT



AUSTIN, TEXAS

DISRUPTIVE TECHNOLOGIES  
(5G, IoT AND AI)

ENABLING INNOVATIVE SMART CITY USE CASES

## Advisory Committee

Stefano Galli, IEEE ComSoc  
Adam Greenberg, ComSoc  
Ashutosh Dutta, IEEE Future Networks  
Fawzi Behmann, IEEE Central Texas Section &  
ComSoc Austin Chapter  
Joel Myers, Rebecca Hammons : IEEE – Smart  
Cities Initiatives  
Dan Stanzione, TACC  
Stan McClellan, Texas State  
Sani Nassif, Radyalis  
Abhay Samant, National Instruments  
Amber Gunst, ATC  
Beverly Kerr, Austin Chamber of Commerce

## Organizing Committee

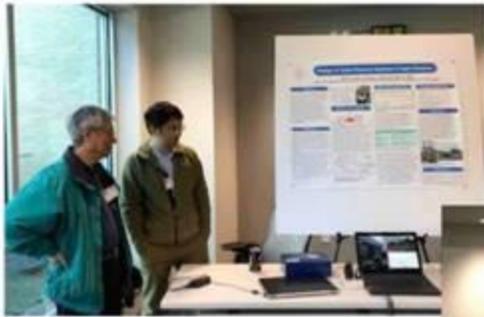
Chairs: Fawzi Behmann  
Venue: Abhay Samant  
Valerie Wise (TACC)  
Finance: Bruce Worthman  
Bill Martino  
Program Fawzi Behmann  
Stan McClellan  
Heena Rathore  
Website: Stan McClellan  
Communications & Marketing:  
Shinett Boggan, Semih Aslan  
Exhibits: James Mercier  
Registration: Kai Wong  
Media: IHS



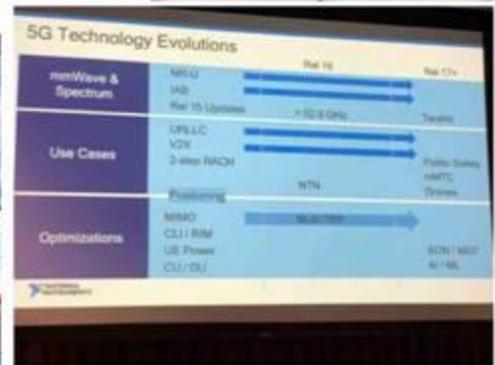
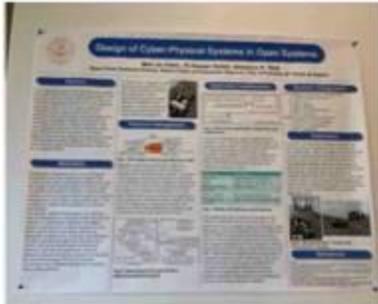








## SCS-Exhibits Showcase



## E. OUTREACH

- October 2, Brooklyn, NY

Supporting IEEE New York Chapter of Computer Society and IEEE NY SMC Society with NY IEEE Day 2019 Celebration Seminar - October 2 at LIU-Brooklyn. Fawzi Behmann, Distinguished Visitor of IEEE Computer Society was invited to present on the topic of "Virtualization – a key driver for 5G and IoT", October 2, Wednesday, 6~ 8:00 PM, at LIU-Brooklyn, Health Sciences Building.

Prof. Ping-Tsai Chung, Fawzi Behmann and the dean,  
University of Long Island, Brooklyn



- **October 15, CETA, Austin**

Supporting Central Texas Electronics Association (SMTA). Fawzi Behmann, was invited to present on the topic of "Preparing for 5G and Collaborative Technologies in Austin", October 15, at Norris Conference Center, Austin.



**Central Texas Electronics Association**  
 Electronics Design & Manufacturing Tech Forum & Expo  
**Tuesday, October 15, 2019**  
 Norris Conference Center behind Northcross Mall in Austin

**Program:**

- 8:30 > Attendee Registration Opens  
*Morning Coffee and Donuts Available*
- 9:00 > "Preparing for 5G and Collaborative Technologies in Austin"  
Fawzi Behmann, *President, TelNet Management Consulting*
- 9:30 > "Identifying Defects on STC Assemblies with X-ray Analysis"  
Dr. Bill Cardoso, *CEO, Creative Electron*
- 10:00 > Trade Show Opens
- 11:00 > "A Strategic Approach to Innovation - Yes, You Can Find Opportunities without Wasting Time or Money"  
Steve Pearson, *Founder, Pearson Strategy Group*
- 12:00 > **FREE** Lunch and Networking in Exhibit Area
- 1:00 > Door Prize Drawings and More Networking
- 1:30 > "Not Just for Software - Innovation Frameworks for Hardware & IoT"  
Shawn O'Keefe, *Founder/Innovation Director, 1st Assembly Supply*
- 3:00 > Trade Show Closes



## F. Volunteering, Ideas and Suggestions

*Central Texas Section offers great opportunities to participate in the growth of the section and its Chapters.*

### *Opportunity to*

- *Join and grow chapters/Affinity group*
- *Speak on a subject you are passionate about*
- *Lead an activity that impact the community*
- *Help out with events and meetings*
- *Volunteer for an event*
- *Start a discussion group*
- *Invite others to be on the CTS Newsletter mailing list*

*Questions? Please send an email to Fawzi Behmann, Chair at [f.behmann@ieee.org](mailto:f.behmann@ieee.org)*

Thank you for being part of the CTS mission in bringing relevant topics, being part of the dialog and discussion and networking events, and in serving our members and communities.

Chairman, IEEE Central Texas Section

Fawzi Behmann

[f.behmann@ieee.org](mailto:f.behmann@ieee.org)

Message from CTS Chairman

## Membership Development

### New to IEEE? Want a refresher on the benefits of your membership?

Go to [www.ieee.org/start](http://www.ieee.org/start) for a step by step approach to maximizing your membership benefits.

After a short introduction video, this site contains a summary of the many benefits of being an IEEE member including Technical Content, Networking, Career Resources, help in finding local activities, Discounts, and Humanitarian and Philanthropic Opportunities. Check it out and MAXIMIZE your membership!

### Not an IEEE Member? Have you been waiting for the right time to join?

Join the IEEE this month and receive 14 months of the benefits of being an IEEE member for the price of 12. Go to [www.ieee.org/join](http://www.ieee.org/join) to begin receiving all the benefits of being an IEEE member NOW.

IEEE is the world's largest technical society, bringing members access to the industry's most essential technical information, networking opportunities, career development tools, and many other exclusive benefits. To find out more, go to [www.ieee.org/membership](http://www.ieee.org/membership)

### Opportunity to make a difference as an Engineer!

As an IEEE member, or simply as an Engineer, we get the opportunity to make a difference in the lives of future engineers AND have some fun at the same time! See the CTS web site or the URLs below for additional details on the listed opportunities.

**Science Fair Judge** – Yes it is science fair season again. There are a number of science and engineering focused schools in the CTS area that host science fairs each year. Commitments are typically a half day. Below are a few of those upcoming science fairs known to the CTS.

- Dec 7, Young Women's Leadership Academy – San Antonio, For further info please call 210 438-6525.
- Dec 7, John Jay Science and Engineering Academy – San Antonio, For further information about judging, go to <https://sites.google.com/a/nisd.net/john-jay-sea-science-fair/science-fair-judge-resources>

- Feb 2, 2019, Junior Academy of Science – San Antonio <http://www.arase.org/>
- February 19-22, 2019, Austin Energy Regional Science Festival 2019 – Austin <http://www.sciencefest.org/index.php>
- March 2, 2019, Alamo Regional Science & Engineering Fair – San Antonio, <http://www.arase.org/>

If you look, there are many more local Science Fairs than are listed above. Pick a school, find out if they have a science fair, register, and go make a difference in the next generation of engineers!

Joe Redfield  
 CTS Membership Development Chair  
[J.Redfield@ieee.org](mailto:J.Redfield@ieee.org)  
 210-744-2968

## IEEE CTS November 2019 EVENTS

### **2019 IEEE Smart City Summit (SCS)** **November 1**

Time: 7:00 am - 6:30 pm -- MORE INFO AND REGISTRATION: <https://attend.ieee.org/scs-2019/>

Location:  
 Texas Advanced Computing Center Research Office Complex (ROC)  
 10100 Burnet Rd (R8700)  
 Austin, Texas  
 United States 78758  
 Building: J.J. Pickle Research Campus, Building 196  
 Room Number: Auditorium

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### **LESSONS LEARNED FROM IEEE SMART CITIES SUMMIT HELD NOV. 1** **November 4**

Time: 6:00 pm - 8:00 pm -- MORE INFO AND REGISTRATION: <https://events.vtools.ieee.org/m/209403>

IEEE DAY Celebration: ComSoc & SP Joint Chapters along with Computer & EMBS joint chapters will host a special post SCS-Smart City Summit briefing

**Presenter:** Fawzi Behmann, Chair, 2019 IEEE Smart City Summit (SCS), Nov. 1, Austin, @ TACC

Abstract: This session will provide a quick highlights of the recent summit on Smart Cities held on Nov. 1 at TACC and describe some of the lessons learned.

QSN1: What effect does disruptive technologies such as IoT, 5G, and analytics AI/ML/DL will have on the market?

QSN2: How can such advance technologies be geared towards building innovative and creative use cases towards Smart Cities, Mobility, and Healthcare?

QSN3: How we leverage both to deliver smart & scalable and secure solutions?

The summit was an opportunity designed to bring strong involvement from the public sector, industry and academia aimed at deepening understanding, fostering a forum for dialog and collaboration, and defining actions needed to accelerate the adoption and deployment of disruptive technologies into key market segments within Smart Cities.

Bio: Fawzi is a visionary, thought leader, author, and entrepreneur in technology positioning, advancing the adoption serving key markets.

Fawzi was the architect in developing telecom network management, defined product releases for network multi service edge, and he promoted SoC Multi-core-Multi-engine for semiconductor embedded systems in both US and Canada.

Fawzi holds a Bachelor of Science with honors and distinction from Concordia University, Montreal; Masters in Computer Science from the University of Waterloo, Ontario and Executive MBA from Queen's University, Ontario Canada.

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Please connect with F. Behmann at [f.behmann@ieee.org](mailto:f.behmann@ieee.org) if you have any question

Location:  
9505 Arboretum  
Austin, Texas  
United States 78729  
Building: AT&T Labs  
Room Number: 220

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**IEEE PI<sup>2</sup> AUSTIN, NOVEMBER 2019, CHAPCOMM, OFFICERS MEETING**  
**November 14**

Time: 11:59 am - 1:30 pm -- MORE INFO AND REGISTRATION: <https://events.vtools.ieee.org/m/207195>

IEEE PI2 Austin, November 2019, ChapComm, Officers Meeting

Location:  
1101 South Mopac Expressway  
IHOP Restaurant  
Austin, Texas  
United States 78746  
Room Number: Private Dining Room

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**CTS WIE, TEMS, YOUNG PROFESSIONALS AND EDUCATION SOCIETY:**  
**SKILLS FOR THE FUTURE**  
**November 18**

Time: 6:30 pm - 8:00 pm -- MORE INFO AND REGISTRATION: <https://events.vtools.ieee.org/m/207538>

Join us for a great discussion of skills for the future. Take a look at "[Are You Developing Skills That Won't Be Automated?](#)" It is only a 5 minute read, and provides some good points to consider AND, we'll have plenty of time for networking!

We'll have

Networking

Great food and drinks!

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

Location:

Cirrus Logic

702 West Avenue

Austin, Texas

United States 78701

Building: Just North of the Parking Garage. Park near West & 7th.

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## IEEE AUSTIN LIFE MEMBER MEETING - YAGI ANTENNA-NOV 19, 2019

**November 19**

Time: 2:00 pm - 4:00 pm -- MORE INFO AND REGISTRATION:<https://events.vtools.ieee.org/m/208131>

The Yagi-Uda antenna was invented in the 1920s, in Japan. In the 90-plus years since then, it has gone from a most-secret component to a common catalog item. Its design formulae are complex, but its operation is simple to explain. This talk will attempt to give that simple explanation with minimal hand-waving. In addition to the theory of operation, the talk will give some history that may surprise you.

**Speaker:** Tom O'Brien of IEEE Life Member-San Antonio

### **Agenda:**

2:00 PM - 2:30 PM - BBQ Lunch on your own and networking

2:30 PM - 2:55 PM - Business

3:00 PM - 4:00 PM - Presentation

Location:

2121 West Parmer Lane @ Lamplight Village St.

Austin, Texas

United States 78727

**Building:** Pok-e-Jo's BBQ Rest

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## IEEE CTCN - HOW ELECTRIIP IS ELECTRIFYING CITY TO CITY TRAVEL IN TEXAS

**November 19**

Time: 6.00 pm - 8:22 pm -- MORE INFO AND REGISTRATION:<https://events.vtools.ieee.org/m/209357>

ElecTrip is solving for the 1000s of labor hours lost by frequent business travelers when traveling between cities located less than 4 hours apart by car. We offer door to door transportation in a private Tesla with Wi-Fi and laptop charging.

**Topic:** " How ElecTrip is electrifying city to city travel in Texas"

**Speaker:** Elliot Lee of ElecTrip

**Abstract:**

ElecTrip is solving for the 1000s of labor hours lost by frequent business travelers when traveling between cities located less than 4 hours apart by car. We offer door to door transportation in a private Tesla with Wi-Fi and laptop charging. Due to the lower operational expense of EVs, we can offer a no compromise service at a cost competitive price. Since our launch in March of 2018, we've serviced over 1000 clients-including Apple, Shell, and Deloitte.

ElecTrip recently signed a contract with Shell, offering employees discounted rides in order to offset carbon emissions during city to city commutes, while also providing a safer option than the ones currently on the market.

**Biography:**

Elliott Lee is a senior at The University of Texas at Austin studying Mechanical Engineering. He is involved with the Longhorn Entrepreneurship Agency on campus and has experience interning at Shell GameChanger, an early stage startup fund/program within Shell. Born and raised in Houston, with a passion for energy, tech, and startups. He serves as the COO for ElecTrip and works alongside Mandeep and the rest of the ElecTrip team.

**Location:**

PoK-e-Jo's Restaurant  
2121 W. Parmer Lane at Lamplight Village  
Austin, Texas  
United States 78727

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**IEEE SAN ANTONIO LIFE MEMBERS APPRECIATION DINNER**  
**November 21**

Time: 6:00 pm - 8:00 pm -- MORE INFO AND REGISTRATION: <https://events.vtools.ieee.org/m/206257>

This year's San Antonio appreciation dinner is going to be special, as the best Life Members Affiliate group in the whole wide world we have alot to celebrate. This will be a joint meeting with some of the other San Antonio chapters. As usual spouses or guests are \$20. Please respond early as we may need a larger room (currently the Fireplace room at the Barn Door on 8400 N. New Braunfels).

**Location:**

8400 N. New Braunfels Ave.  
San Antonio, Texas  
United States 78209  
Building: Barn Door  
Room Number: Fireplace room

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## ENABLING EFFICIENT AND RELIABLE EDGE COMPUTING FOR IOT November 22

Time: 11.30 am - 1:00 pm -- MORE INFO AND REGISTRATION: <https://events.vtools.ieee.org/m/206703>

ENABLING EFFICIENT AND RELIABLE EDGE COMPUTING FOR IOT

**Topic:** "Enabling efficient and reliable edge computing for IoT"

**Speaker:** Dr. Mimi Xie

**Abstract:**

The rapidly expanding market size of the Internet of Things (IoT) has raised fundamental challenges in processing/transmitting unprecedented volume of data and powering all these devices. To address the limitations of cloud computing, the new technologies of edge computing leveraging the power of local computing close to where data are collected has become a promising solution in reducing the transmission overhead and supporting delay-sensitive and context-aware services. However, it further poses significant challenges in designing the computing and transmission system, memory system, and energy storage in embedded devices. Besides the challenge in designing a single device, new methodologies for data fusion, task distribution, and cooperative heterogeneous system on both edge and cloud are also in urgent need to enable efficient edge computing for IoT applications. This talk will discuss those new challenges and possible solutions. In the end, the design trends for the next-generation IoT system and future research directions will also be discussed.

Lunch will begin promptly at 11:30am. The Guest Speaker presents from 12pm-1pm

Location:

Building 161

145 Tom Slick Ave, San Antonio, TX 78238

San Antonio, Texas

United States

Building: Cafeteria, Southwest Research Institute

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## CTS TEMS IEEE DAY CELEBRATION--PART 2--TECH NIGHT AT THE THEATER!! November 30

Time: 6:30 pm - 10:00 pm -- MORE INFO AND REGISTRATION: <https://events.vtools.ieee.org/m/206431>

IEEE Event, brought to you by IEEE Young Professionals, Women in Engineering, Technology and Engineering Management Society and Education Society

We'll complete our celebration of IEEE Day with Tech Night at the Theater!

We'll see "As You Like It" at the Rollins Theater, followed by a champagne reception with the cast and crew!

Join us for a wonderful performance and an opportunity to chat with the cast and crew on Saturday of Thanksgiving Weekend! Family visiting from out of town? Bring your family and friends! And make new ones (friends, that is)!

IEEE Central Texas Section is providing half priced tickets to the first 20 people who sign up for the event! Register now and pay only \$20 for great seats at the Saturday night (11/30) performance!

**Agenda:**

6:30 Tech gathering in the lobby

7:00 Performance

10:00 Champagne Reception

Location:

Rollins Theater

701 W Riverside Dr.

Austin, Texas

78704

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

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

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