

### IEEE Central Texas Newsletter

### 02

### **Message from the Chairman**



With your help, support and participation, the Central Texas Section (CTS) has completed a great year and is prepared for an exciting a year ahead. BIG THANK to our members and the Central Texas community.

IEEE CTS Chairman

Fawzi Behmann



### **IEEE Membership Development**

### RENEW YOUR IEEE MEMBERS TODAY

It is easy to forget and easy to put off. If you haven't renewed your IEEE membership, or don't know if you have, go to your MYIEEE account NOW and check at <a href="https://www.ieee.org/myieee">www.ieee.org/myieee</a> or call 800 678-4333.

OR just renew now to avoid loss of any of your IEEE benefits at <a href="https://www.ieee.org/renew">www.ieee.org/renew</a>.

If you have already renewed, thank you for being part of the Central Texas Section and the IEEE, the world's largest technical professional association. We have a lot planned for you in the CTS for 2019.

Visit <a href="https://www.ieee.org/membership">www.ieee.org/membership</a> to view all YOUR benefits of IEEE membership.



### **IEEE Texas Technical Tour - 2019**

Planning ahead, an IEEE Texas Technical Tour is being organized by the San Antonio Life Member Affinity Group (LMAG) of the Central Texas Section and Region 5.



### **IEEE CTS EVENTS**

Come and see our section events.

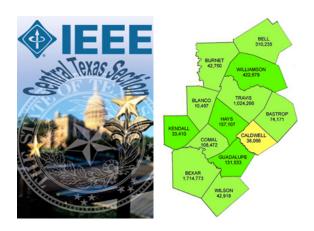
### **Message from CTS Chairman**

Chairman, IEEE Central Texas Section
Fawzi Behmann

f.behmann@ieee.org

### A. 2018 Highlights

I want to s2018 hare some of the successes we had in 2018 and highlights some of the exciting plans for 2019.



- Regarding identity, we have articulated on the Central Texas Section physical boundary by counties and developed an icon for the section that we can use. The CTS is one of the largest sections in Region 5 (26 sections), with over 3900 members with students represent 12% and over 25 chapters and affinity groups spanning Austin to San Antonio.
- The CTS has led in organizing and executing on an international conference GreenTech of Smart City that was held April 4-6, in Austin. The conference offered 4-track, three days conference bringing over 220 in attendance form Academia, Industry and Government under one roof with over 37-panel sessions &, 80 speakers, 38 papers along with five keynote speakers, five workshops and technical tours.
- Introduced next general the CTS Newsletter as a part of the communication portal for the CTS.
- Solidify the base with special leadership and operational training for chapter, affinity and section officers and committee leaders.
- Focused on streamline the process in the financial plan, started quarter reporting and focus on chapter vitality.
- Focusing on becoming relevant both to our members and the community at large. Examples: IEEE Day/ Innotech collaboration, IEEE/Dell Medical Block-Chain Healthcare Initiatives.
- Introduced measures to improve student activities beyond student annual competition.
- Reach out to students with STEM program, Congressional dialogue with PACE initiatives.
- Supported both local industry activities and events for Central Texas. Examples Future Leadership Forum (July 2018),
- Support members in professional development (Membership upgrade, Distinguished Lecturer program, etc.). Central Texas Section currently has 3,939 members, with over 48 Fellows and 428 Senior Members and as a part of the Distinguished Lecturer Program has covered over 16 Lecturers in 8 cities in 3 countries in 2018.

### **B. Exciting Plans for 2019**

It is a great time to be a member of IEEE (see December 2018 chairman column, https://www.ieee.org/membership/benefits/index.html) as we are about to lay down a great and exciting plan for 2019 that will help you to:

- Network with other technology professionals
- Join and participate in discussions on various technical interests
- Create a group to share and collaborate on projects
- Discover IEEE events and activities throughout the world
- Establish a professional profile highlighting your accomplishments

### Among the exciting plan:

Initiative 1: Collaborate with Government, Industry, and Academia and hold series of events that discuss technology trends in collaborative technologies such as 5G/6G, IoT, AI/ML, Nano-technology, cybersecurity and impact on building smart solutions for our communities and cities

Initiative 2: Empower Students to hold 2019 Student Conference capitalizing on virtual techniques and a series of standalone fulfilled activities

**Initiative 3:** Develop Communication portal for networking, blogging, and technology/group discussions.

If you like to be a part in any one of these three initiatives, then please provide contact information and areas of expertise at <a href="http://sites.ieee.org/ctx/contact/">http://sites.ieee.org/ctx/contact/</a>

### C. Special Events Planned for January 2019

Please consult the remaining part of this newsletter and consult the calendar of events at the Section website http://sites.ieee.org/ctx/

Among the topics of interest:

- IEEE San Antonio Computer Chapter, topic "Deep Learning in Theory and Practice for Computer Vision Image recognition problems," Jan 15, 7-8:30 pm
- IEEE Austin ComSoc/SP and EMBS & Computer Joint chapters ushering the new year with a special topic on "Collaborative Technologies Trends in 2019", Jan 24, 6-8pm
- IEEE San Antonio TEMS, topic "Organizational Response to Emerging Cybersecurity threats," Jan 24, 11:30-1pm
- IEEE Austin PI2, Tour of M3 Design, Jan 29, 5:45-8:00 pm

### D. Interested to Help?

If you have any question or you want to

- Volunteer for Central Texas, or
- Suggest special session, or
- Get involved in the planning for 2019

Please contact Fawzi Behmann, Chair, at f.behmann@ieee.org.

Thank You,

Fawzi Behmann



# Membership Development

### Have you renewed your IEEE membership for 2019?

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### Did you know about IEEE Member Benefits

Have you looked at all the benefits you receive as an IEEE member? Are you taking advantage of all that IEEE has to offer? If you're like me, you probably know of a few benefits and are taking advantage of

The latest IEEE member Benefits Bulletin is available. Go to: IEEE Member Benefits for the latest on

- authoring through IEEE Collabratech,
- · member discounts on insurance, UPS shipping, computer purchases, and Wiley-IEEE Press,
- continuing educational opportunities through online learning and eBbooks, one free each month. See the current offering at <a href="https://www.ieee.org/publications/books/ebookclassics.html">https://www.ieee.org/publications/books/ebookclassics.html</a>

### Did you know about IEEE - IEEE Collabratec

IEEE has created an online tool to assist IEEE Members AND non-members in career development.

The IEEE Collabratec™ online community offers a suite of productivity tools and is available to technology professionals around the world with exclusive features for IEEE members. Plus sign up is free to everyone. IEEE Collabratec™ can help you:

- Connect with global technology professionals by location and
- Access robust networking, collaboration, and authoring tools dedicated to technology professionals
- Establish a professional identity to showcase key accomplishments

### Go to Collabratec NOW

You do NOT have to be an IEEE member to join IEEE Collabratech.

Joe Redfield CTS Membership Development Chair J.Redfield@ieee.org 210-744-2968

### **IEEE Texas Technical Tour - 201**

lanning ahead, an IEEE Texas Technical Tour is being organized by the San Antonio Life Member Affinity Group (LMAG) of the Central Texas Section and Region 5.

Registration: <a href="http://sites.ieee.org/ieee-tx-technical-tour/">http://sites.ieee.org/ieee-tx-technical-tour/</a>

vTools: <a href="https://events.vtools.ieee.org/m/178799">https://events.vtools.ieee.org/m/178799</a>

Questions: s.atkinson@ieee.org

Texas is the home to a number of centers of technical excellence of national importance, as well as several key IEEE historical awards including Milestones celebrating technological breakthroughs or turning points. These will form the basis for a number of technology-oriented visits throughout Texas organized by the San Antonio Life Member Affinity Group (LMAG) of the Central Texas Section, Region 5 of IEEE.



The Tour, limited to 50 guests, is scheduled for mid Oct 2019 and will consist of a 10-day bus tour to significant technical sites planned in Houston, San Antonio, Austin, Waco and Dallas. Cultural and historical sites will also be included along with many social events with local IEEE members. Most meals, plus all transportation, entrance fees and gratuities are included in one price per person.

### Cities:

- HOUSTON, TX
- SAN ANTONIO, TX
- AUSTIN, TX
- WACO, TX
- DALLAS, TX

We have vTools registration is now officially open.

Please check vTools registration Link <a href="https://events.vtools.ieee.org/m/178799">https://events.vtools.ieee.org/m/178799</a>

Questions should be referred to me at <a href="mailto:s.atkinson@ieee.org">s.atkinson@ieee.org</a>.

## **IEEE CTS JANUARY 2019 EVENTS**

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IEEE PI2 Austin, January 2019, ChapComm, Officers Meeting

Time: 11:30 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/184678

IEEE PI2 Austin, January 2019, ChapComm, Officers Meeting

#### **Location:**

1101 South Mopac Expressway
IHOP Restaurant
Austin, Texas
United States 78746

Room Number: Corner of Main Dining Room

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IEEE PI2 Austin, January 2019, ChapComm, Officers Meeting

Time: 1:30 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/184678

IEEE PI2 Austin, January 2019, ChapComm, Officers Meeting

#### **Location:**

1101 South Mopac Expressway IHOP Restaurant Austin, Texas United States 78746

Room Number: Corner of Main Dining Room

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IEEE SA Computer Chapter: Deep Learning In Theory and Practice for Computer Vision

Time: 7.00 pm - 8:30 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/185507

**Topic:** "Deep Learning: In Theory and Practice for Computer Vision"

**Abstract:** In the last decade the field of computer vision has seen significant changes with advances in deep learning. Companies such as Google, Facebook, and Amazon are leveraging deep learning to solve challenging large scale image recognition problems. In this talk, Dr. David Anthony will discuss the research that lead to these advances, challenges facing the field, and how researchers at Southwest Research Institute are using deep learning in diverse areas, such as autonomous driving, methane detection, and sports analytics.

**Presenter:** David Anthony of Southwest Research Institute

Dr. Anthony researches computer vision and machine learning technology for robotics, factory automation, and other applications. He also actively researches solutions for localization, navigation, and path planning for robots in challenging and unstructured environments. Dr. Anthony received his Ph.D. from the University of Nebraska - Lincoln in Computer Engineering in 2016 where he researched wireless sensor networks and field robotics.

### **Location:**

St. Marys University
1 Camino Santa Maria
San Antonio, Texas
United States 78228
Building: University Center, Conference Room B

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### The Airborne Laser Program

Time: 11.30 am - 1:00 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/185671

The concept of using an airborne laser weapon system for missile defense evolved in the late 1960's. Critical to the development of an airborne laser system was the support of several large-scale demonstrations in which various technical issues were uncovered and dealt with. As a result of the larger airborne laser program, many key technologies have been developed in such fields as optics, materials science, fluid aerodynamics, and laser bioeffects. As demand for these type of weapon systems continues to grow, many of those technologies are being employed in today's new designs.

Speaker: Garrett Polhamus

#### Location:

8633 Crownhill Blvd. San Antonio, Texas United States 78209



### IEEE CENTRAL TEXAS SECTION SPRING EXCOM & SECCOM MEETING

Time: 7:00 am - 3:00 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/184577

Join us for our IEEE Central Texas Section Spring ExCom & SecCom meeting where we will review our 2018 events and plan for 2019. Meet friends and make new friends, enjoy breakfast and lunch.

### Agenda:

07:00	Setup,	Coffee,	Sign-in,	Networking,	Breakfast
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07:55 Call to Order, Approve Agenda

08:00 Roll Call / Introductions

08:20 Section and Officers

09:30 Stragegic Plan/Info Base I/ Initatives

9:45 Break

Standard Committee Reports 10:00

10:30 Info base II

11:00 Chapter/ affinity Group Reports\*

12:10 Lunch

13:00 Student Branch Chair Activities

14:15 Chapter Reports continued

14:40 New Business/Motion

15:00 Adjourn

### **Location:**

Texas State University 49 N Comanche St San Marcos, Texas United States 78666

Building: Roy F. Mitte Building, 5th Floor

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### IEEE PI2 Austin, January 2019, Tech Meeting, "Challenges in Interconnecting Renewable Energy Resources to the Grid"

Time: 6.30 pm - 8:30 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/186408

**Topic:** "Deep Learning: In Theory and Practice for Computer Vision"

**Abstract:** What does it take for a renewable generator to connect to the grid? What are the struggles faced by the renewable industry in connecting to the grid? Rules and requirements for connecting generation, and specifically renewable generation, to the electric grid have been evolving and creates both technical and business challenges. We will talk about these issues and how we are addressing these to work with the utilities and RTO/ISO organizations. Speaker: Jennifer Ayers-Brasher, PE, Director, Transmission & Market Analysis, E.ON Climate and Renewables, NA of E.ON Climate and Renewables, North America (E.ON)

Bio: Jennifer Ayers-Brasher is a graduate of the Colorado School of Mines as an Electrical Engineer. She also earned her Master's Degree in Engineering Management from Drexel University. She spent a little over 6 years at PPL Electric Utilities in system operation and transmission planning. For the past 12 years she has worked in the renewable energy arena, with 11 of those at E.ON, a global energy company. The focus at E.ON is transmission, generation interconnection and electric market impacts. Currently the Director, Transmission & Market Analysis she leads a team that addresses these issues across the county and in several markets, with recent focus on interconnection queue reforms for several RTOs and ISOs and the associated FERC proceedings.

#### Location:

2700 West Anderson Lane Austin, Texas United States 78757 Building: Cover 3



### IEEE TEMS San Antonio Chapter Seminar: Organizational Response to Emerging Cybersecurity Threats

Time: 11.30 am - 1:00 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/185482

The San Antonio Chapter of the IEEE Technology and Engineering Management Society will be hosting a seminar on organizational response to emerging cybersecurity threats. Cybersecurity threats are becoming more prevalent every day. How an organization responds to these threats is important, not just from a techincal perspective but also from a management perspective. Overracting can be just as harmful to an organization as underreacting to the threat.

**Speaker:** David A. Dampier, Ph.D. Professor and Department Chair Information Systems and Cyber Security College of Business U.T. San Antonio https://business.utsa.edu/faculty/david-dampier/

11:30am-1:00pm. Lunch is available for purchase at the SwRI cafeteria. Please RSVP so we can get an accurate headcount.

### **Location:**

Room: Private Dining Rooms 1 & 2 Bldg: Cafeteria 6220 Culebra Road San Antonio, Texas

78238

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### CPS ENERGY'S FLEXIBLE ENERGY PATH - SAN ANTONIO PES

Time: 6.00 pm - 8:00 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/182612

PES San Antonio Monthly meeting - CPS Energy's Flexible Energy Path, using renewable energy and distribution connected energy sources with traditional power plants. Creating inovative business models and tarrifs for the future.

Speaker: Angela Rodriguez of CPS Energy

### Agenda:

6:00 PM to 6:30 PM Registration 6:30 PM to 7:00 PM Meal 7:00 PM to 8:00 PM Speaker

### **Location:**

4109 Fredericksburg Rd San Antonio, Texas United States 78201 Building: Gradey's BBQ Room Number: Meeting room

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IEEE ComSoc/SP and EMBS/Computer Joint Chapters – Austin, Celebrate the beginning of 2019 with a presentation on "Collaborative Technologies Trends"

Time: 6.00 pm - 8:00 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/185661

**Topic:** "Collaborative Technologies Trends"

### **Abstract:**

Clearly we have witnessed market growth in both technology penetration and use cases. This was evident in the introduction of IoT, blockchain, virtualization, analytics and where 5G roadmap is moving beyond lab trials into early pre-commercial trials.

We have for the first time start see activities with drones, wearables, tattoo and nanotechnology, quantum computing and others. We also have witnessed many accounts were compromised because of challenges from hackers. What kinds of trends can we anticipate in 2019, what impact would such collaborative technology have as an impact? Would we see a new class of impactful services?

Would these produce what is called a smart community/city?

Fawzi Behmann will address these topical challenges and highlights an agenda for IEEE Austin 2019

**Speaker:** Fawzi Behmann,

President, TelNet Management Consulting, Inc. Vice-Chair and DL, IEEE NA Communications Society

#### Agenda:

6:00 - 6:20 PM Networking Meet and Greet

6:20 - 6:30 PM Introduction

6:30 - 7:30 PM Feature presentation

7:30 - 8:00 PM Q/A, Networking

8:00 - 8:30 PM Networking

### **Location:**

Room: #220 Bldg: AT&T Labs 9505 Arboretum Austin, Texas 78729

### IEEE PI2 Austin, Tour of M3 design

Time: 5:45 am - 8:45 pm -- MORE INFO AND REGISTRATION: https://events.vtools.ieee.org/m/177513

Speaker: John Bernero

Agenda:

M3 Design is a leading product development firm focused on Industrial Design / Mechanical Engineering solutions for our clients. Since our founding in 1996, we've accumulated experience in almost every industry; everything from delicate medical devices to large-scale, multi-system industrial equipment to consumer-centric wearables. We help our clients solve impossible problems and have launched countless products into their markets. Whether our clients need support conducting research and setting strategy, showcasing conceptual designs, or gearing up for manufacturing, M3 is ready to dive in. No matter the challenge, our team is passionate about crafting the best solution for every product and executing that vision with the utmost quality.

#### Location:

575 Round Rock West Dr. Round Rock, Texas United States 78681 Building: Suite 100

