

IEEE Central Texas Section 2023 Summer/Fall Leadership Planning Meeting January 21, 2023 San Marcos, TX & Virtual

Section Committee/Officer Name: Fawzi Behmann

Chapter/Affinity Name: CTS Joint ComSoc & SP & CTSoc and CTS Joint Computer & EMBS



2023 Vision, Leadership Team

Organizational Unit (OU) Name:

Comm/Sig Proc./ConsumerTech (COM19/SP01/CE08) Computer & EMBS (C16/EMB18)

Vision/Objectives/2022 Focused Initiatives*

seek to be the inclusive organization of choice relevant to the Central Texas professional community in *providing education, reaching out and networking* for members and outreach professional community.

Theme: Smart Ecosystems empowered by enabling technologies (such as 5G/6G, IoT/Edge Computing, Cloud/AI, Security/Blockchain) driving smart networking solutions and innovative use cases.

Deliverables:

Hold monthly high-quality technical meeting with relevant topics given by domain experts Leverage Distinguished Lecturer/Speaker and multihost feature to expand coverage Community Outreach Initiatives - Senior Design Students Collaboration, Education and Networking events Focused groups and workshops

Support: Website & eNotice/Listserv, Social media, Feedback form, Finance



2023 Vision, Leadership Team

Leadership Team

Central Texas Austin ComSoc-SPSoc-CTSoc Joint Chapter

Chair - Fawzi Behmann

Vice Chair – Norma Antunano

Secretary/Program logistics – open

Webmaster - Nitin Garg

Treasurer – Fawzi Behmann

Membership Development – Daniel Lewis

Social Media – Frances Scott

Past Chair – Hanan Potash

Central Texas Austin Computer-EMBS Joint Chapter

Chair – Fawzi Behmann

Vice Chair – Hema Ramaswamy

Secretary/Program logistics – open

Webmaster – Nitin Garg

Treasurer – Hema Ramaswamy

Membership Development – Open



OU Joint Chapter Size and Profile

	(1) 207	(2) 501	(TTL) 665	(ComSoc) 149
Student	6	12	16	4
Graduate Student Member	17	21	35	13
Member	97	237	313	63
Senior Member	41	66	100	31
Fellow	12	16	27	9
Life Fellow	3	6	8	2
Life Member	17	65	77	15
Life Senior	13	34	44	11
Affiliate	1	41	42	1
Associate Member		3	3	

(1) Central Texas. Sect Jt. Chap, Com19/SP01/CT08 Austin
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(2) Central Texas Section Chapter, C16/EMB18 Austin

(TTL) Com19/SP01/CT08 + C16/EMB18 Austin

(ComSoc) IEEE Communications Society



2022 - Summary of Meetings (vTools)

ComSoc/	SPS/CTSoc				
2022 Meet	ings 32	(2 Admin, 1 Prof., 29 Tech), VDL 18 DLT 1			
Jan	1	"5G/6G Enable Edge Computing and Edge AI"			
Feb	1	"Advancement of Technology Unleash Great Opportunities for Students, How can IEEE help?"			
Mar	1	"Integration of Terrestrial Networks and Extreme Environments: Challenges and Capabilities"			
May	4	"Big Data Privacy", "Deep & Reinforcement Learning in 5G/6G", "WCNC 2022 Key messages", Admin			
Jun	2	"Future of smart ecosystem", "NEXT G Summit"			
Jul	4	"Advanced Satellite Networking and IoT Applications"			
Aug	2	"Q-carbon as a Field Emission Electron Source", "Development of Emotion Recognition with ML Techniques"			
Sep	7	"WIFI Sensing", "V2X for Intelligent Transportation", "Wireless Nano-bio Comm", "IoT Applic & Security"			
		"Building safe Smart Cities & Communities", "AI-based zero Energy in Comm 6G", "Engineering Leadership"			
Oct	5	"Connecting Space Asset to Internet - IEEE Day", "Rise of Quantum Internet", "Intro OOSEM & SysML Course"			
Nov	2	"Spectrum Sharing", "AI in 6G"			
Dec	3	"Algorithms & protocols joint comm", "New Optics in the next 5-10 years", "Full Duplex Distributing Comm"			
Computer,	/EMB				
2022 Meet	ings 18	(2 Admin, 1 Prof., 15 Tech), VDL 10 DLT 1			
Jan	1	"5G/6G Enable Edge Computing and Edge AI"			
Feb	1	"Advancement of Technology Unleash Great Opportunities for Students, How can IEEE help?"			
May	2	"Deep & Reinforcement Learning in 5G/6G", "WCNC 2022 Key messages", Admin			
Jun	1	"Future of smart ecosystem"			
Jul	1	"Advanced Satellite Networking and IoT Applications"			
Aug	2	"Q-carbon as a Field Emission Electron Source", "Development of Emotion Recognition with ML Techniques"			
Sep	5	"V2X for Intelligent Transportation", "Wireless Nano-bio Comm", "IoT Applic & Security"			
		"AI-based zero Energy in Comm 6G", "Engineering Leadership"			
Oct	4	"Connecting Space Asset to Internet - IEEE Day", "Rise of Quantum Internet", "Intro OOSEM & SysML Course"			
Dec	1	"Full Duplex Distributing Comm"			



2022 Other Activities/Events

General Chair WCNC 2022 (April 10-13, Austin) - Sponsored with ComSoc, CTS and Lonestar International Conference – Hybrid format:

4-day conference, 832 in attendance from 46 countries, 21 sponsors & suppoprters, rich industry & technical program (361 papers published via IEEE (eXplore) and social/appreciation functions: 9 Keynote speakers, 2 Executive forum Sessions, Dialog with Industry leaders, 13 Industry panel sessions, 7 industry presentations, Startup Forum, 12 tutorials, 13 workshops, 17 technical sessions, WIE, and Welcoming reception, Dialogue with Industry Wine & Cheese reception VIP/OC Appreciation Dinner, Conference Banquet networking opportunities, virtual/physical Industry Exhibits. https://wcnc2022.ieee-wcnc.org

IEEE Day

Full day, supported by Texas State and UT Austin campuses and other chapters. Hosted lecture to faculty & students, Booth, touring lab facilities, address members and local community.

Leveraged virtual DL Program and increased coverage collaborating with other chapters/regions using vTools host capability

Outreach: Organize and chair multiple Industry panels:

Future Networks Forum (October 12-14), GET Blockchain (Nov 9-12), Globecom 2022 (Dec. 4-8)

Represent chapter, society at key events/functions.

Example: Mobile World Congress (May, Las Vegas), Addressed Eta Kappa Nu graduating class (June - Virtual), Conference Committee & Meeting Series (Nov - Vancouver), ComSoc GCCC - Global Chapter Chair Community (December, Brazil)

2023 Chapter Vitality & Help Needed

Chapter Vitality Assessment (Strong, Ok, Need Improvement)

Despite restriction caused by Pandemic, strived to reach out through Zoom and hybrid and some in-person focused activities:

- Collaboration with societies, section, other chapters on key events.
- Leveraged Distinguished Lecture Program, offering diverse & relevant topics given by domain expert speakers
- Diverse Activities & great volunteer efforts: Conference, Workshop, Technical talks, Webinars/Tutorial, social events

Top Help Needed/Issues for 2023

Identify alternate Meeting Space: AT&T longtime supporter is not ready to provide use of their facilities.

Volunteers – open positions and support key initiatives

Plans for 2023?

Host special recruitment events for students and development of student branch chapter.

Organize events/summits engaging Industry, Academia, YP/WIE/STEM Organize education/training/social/appreciation events jointly with other chapters/section

2022 Meetings (vTools) -

	Col	mSoc/SPSoc/CTSoc
Seq	Event Title	
1	VDL talk on	"5G/6G ENABLE EDGE COMPUTING AND EDGE AI"
2	VDL talk on	"Advancement of Technology Unleash Great Opportunities for Students ,Äì How

can IEEE help?"

3 IEEE ComSoc NY Chapter "Integration of Terrestrial Networks and Extreme Environments: Challenges and Capabilities"

4 ComSoc/SP/CT and Computer/EMBS Chapter - Membership Development Officer Meeting / Planning 5 Big Data Privacy: from Networking and Artificial Intelligence Perspectives - Distinguished Lecture

6 Deep and Reinforcement Learning in 5G and 6G 7 VDL talk on ,"WCNC 2022 Key Messages and Best of Practices"

9 First IEEE Next G Summit 2022 (Hybrid)

12 VDL talk on "Advanced Satellite Networking and IoT Applications" -3 13 VDL talk on "Advanced Satellite Networking and IoT Applications" -4 14 Chapter Leadership Planning Meeting

31 IEEE BV-COMSOC Talk: Perspective of pluggables vs. CPO for new optics in next 5-10 years

16 Introduction to Wi-Fi Sensing and the IEEE 802.11bf Standard

18 VDL-" Wireless Nano-Bio Communication Networks enabled by Optogenomic Interfaces"; ComSoc Week, Webinar#1 of 2 19 Internet of Things: Applications, Enablers, Security 20 VDL-, ÄúCognitive Approach to Building a Safe and Smart Cities/Societies" ComSoc Week, Webinar #2 of 2

21 VDL talk on "AI Based Zero Energy Communication in 6G" 22 Engineering Leadership: How to Drive your Team to Deliver Products without Driving them Nuts! 23 IEEE Day - DL Prof. Atiquzzaman on "Connecting Space Assets to the Internet: Challenges and Solutions"

24 IEEE Day - Networking Opportunity with DL Prof. Atiguzzaman at UT EER Booth 25 IEEE Day - DL Prof. Atiguzzaman on "Connecting Space Assets to the Internet: Challenges and Solutions" 26 VDL talk on "The rise of the Quantum Internet: From No-Cloning to Teleportation" 27 Sat 10-22-2022 9-5 INTRO OOSEM & SysML Course

28 VDL: Generative Adversarial Networks for Spectrum Sharing 29 VDL: AI in 6G Networks - Path from Enabler to AI Native Air Interface 30 Algorithms & protocols joint coms, localization, sensing by Dr. George Alexandropoulos

9/21/22 12:00 9/21/22 18:30 10/4/22 11:30

10/4/22 13:55

Event Date

1/19/22 18:00

2/15/22 19:00

3/29/22 19:00

5/24/22 18:00

5/26/22 17:45

5/26/22 18:00

6/10/22 12:00

7/27/22 12:00

7/27/22 12:00

7/27/22 12:00

7/27/22 12:00

8/23/22 19:00

8/25/22 18:00

9/7/22 17:00

9/13/22 13:00

9/15/22 11:00

9/15/22 18:00

9/17/22 11:00

6/14/22 9:00

5/4/22 10:55

11/11/22 15:30 12/8/22 10:00 12/8/22 18:30

8 VDL talk on ,"The Future of smart ecosystem empowered by IoT Collaborative Technologies" 10 VDL talk on "Advanced Satellite Networking and IoT Applications "-1 11 VDL talk on "Advanced Satellite Networking and IoT Applications" -2 15 Special Double Feature Presentations "Q-carbon as a Field Emission Electron Source" & "Development of Emotion Recognition with ML Techniques and Challenges" 17 VDL: Reliable and Scalable Vehicle-to-Everything (V2X) Protocol Design for Intelligent Transportation

10/4/22 17:30 10/20/22 10:00 10/22/22 9:00 11/2/22 16:00

32 IEEE Future Networks Distinguished Lecture Series: Full-Duplex Distributed Integrated Sensing and Communications 12/20/22 11:00

2022 Meetings (vTools) – Computer Soc/EMBS

Meetings Held/Reported in vTools (month, topic,):

SEQ	Event Title	Event Date
1	VDL talk on "5G/6G ENABLE EDGE COMPUTING AND EDGE AI"	1/19/22 18:0
2	VDL talk on "Advancement of Technology Unleash Great Opportunities for Students " How can IEEE help?	2/15/22 19:0
3	Deep and Reinforcement Learning in 5G and 6G: Virginia Mountain Section	5/26/22 17:4
4	VDL talk on ,WCNC 2022 Key Messages and Best of Practices	5/26/22 18:0
5	VDL talk on ,"The Future of smart ecosystem empowered by IoT Collaborative Technologies"	6/10/22 12:0
6	VDL talk on " Advanced Satellite Networking and IoT Applications "	7/27/22 12:0
7	Chapter Leadership Planning Meeting	8/23/22 19:0
8	Special Double Feature Presentations "Q-carbon as a Field Emission Electron Source" &	8/25/22 18:0
	"Development of Emotion Recognition with ML Techniques and Challenges"	
9	VDL: Reliable and Scalable Vehicle-to-Everything (V2X) Protocol Design for Intelligent Transportation	9/13/22 13:0
10	VDL-" Wireless Nano-Bio Communication Networks enabled by Optogenomic Interfaces"; ComSoc Week, Webinar#1 of 2	9/15/22 11:0
11	VDL- ,ÄúCognitive Approach to Building a Safe and Smart Cities/Societies,Äù; ComSoc Week, Webinar #2 of 2	9/17/22 11:0
12	VDL talk on "AI Based Zero Energy Communication in 6G"	9/21/22 12:0
13	Engineering Leadership: How to Drive your Team to Deliver Products without Driving them Nuts!	9/21/22 18:3
14	IEEE Day - DL Prof. Atiquzzaman on "Connecting Space Assets to the Internet: Challenges and Solutions"	10/4/22 11:3
15	IEEE Day - Networking Opportunity with DL Prof. Atiquzzaman at UT EER Booth	10/4/22 13:5
16	IEEE Day - DL Prof. Atiquzzaman on "Connecting Space Assets to the Internet: Challenges and Solutions"	10/4/22 17:3
17	VDL talk on "The rise of the Quantum Internet: From No-Cloning to Teleportation"	10/20/22 10:0
18	IEEE Future Networks Distinguished Lecture Series: Full-Duplex Distributed Integrated Sensing and Communications	12/20/22 11:0

