

2025 Annual Report (June 2024 – May 2025)
CASEO Technical Committee
IEEE Circuits and Systems Society

Chair: Ljiljana Trajkovic
Secretary: Vasileios Ntinias

1. Technical Committee/Special Interest Group Meeting(s):

Please provide information on the TC/SiG meetings held in the past year, including date, time, location, attendance rate, and if a quorum was present.

2. Voting Members:

First Name	Last Name	Affiliation	Email	IEEE Grade	IEEE Region
Ahmed	Abdelgawad	Central Michigan University, USA	abdel1a@cmich.edu		1-6
Pamela	Abshire	University of Maryland, USA	pabshire@umd.edu	Fellow	1-6
M. Omair	Ahmad	Concordia University, Canada	omair@ece.concordia.ca	Fellow	7
Eduard	Alarcon	Polytechnic Univ. of Catalonia (UPC), Barcelona	eduard.alarcon@upc.edu	Senior Member	8
Massimo	Alioto	Univ. Siena, Italy (now at National University of Singapore, Singapore)	malioto@ieee.org	Fellow	10
Babak	Ayazifar	Univ. California, Berkeley, USA	ayazifar@eecs.berkeley.edu		1-6
Magdy	Bayoumi	Univ. of Louisiana, USA	mab@cacs.louisiana.edu; magdy1112@yahoo.com	Fellow	1-6
Sergio	Callegari	Univ. Bologna, Italy	Sergio.callegari@unibo.it		8
Marco	Carminati	Polit. Milano, Italy	marco1.carminati@polimi.it		8
Zhibo	Chen	Univ. of Science and Technology China	chenzb@ieee.org; chenzhibo@ustc.edu.cn	Senior Member	10
Malgorzata	Chrzanowska-Jeske	Portland State Univ., USA	jeske@ece.pdx.edu		1-6
Martin	di Federico	Univ. Nacional del Sur, Argentina	mdife@ieee.org	Senior Member	9
Ibrahim	Elfadel	Khalifa University	ibrahim.elfadel@ku.ac.ae	Senior Member	8
Orla	Feely	Univ. College Dublin, Ireland	orla.feely@ucd.ie	Fellow	8
Mattia	Frasca	Univ. Catania, Italy	mattia.frasca@dieei.unict.it		8
Randy	Geiger	Iowa State University, USA	rlgeiger@iastate.edu; r.geiger@ieee.org	Fellow	1-6
Magdy Tawfik	Hanna	Fayoum University, Egypt	hanna@ieee.org	Life Senior Member	8
Yun	He	Tsinghua University, China	hey@tsinghua.edu.cn	Fellow	10
Yih Fang	Huang	Univ. Notre Dame, USA	huang@nd.edu	Fellow	4
Mohsin M.	Jamali	The University of Texas Permian Basin, USA	mohsin.jamali@utpb.edu; Mohsin.Jamali@utoledo.edu	Senior Member	5
Gordana	Jovanovic Dolecek	National Institute of Astrophysics, Optics and	gordana@ieee.org	Life Senior Member	9

		Electronics, Mexico			
Izzet	Kale	Univ. of Westminster, UK	kalei@wmin.ac.uk; kalei@westminster.ac.uk; izzet.kale@gmail.com		8
Peter	Kennedy	University College Dublin, Ireland	peter.kennedy@ucd.ie	Fellow	8
Shoba	Krishnan	Santa Clara University, USA	skrishnan@scu.edu		1-6
Raija	Lehto	Tampere Univ. Technology, Finland	raija.lehto@ieee.org		8
Yong	Lian	York University, UK	eleliany@gmail.com	Fellow	7
Jiaying	Liu	Peking University, China	liujiaying@pku.edu.cn	Senior Member	10
Arjuna	Madanayake	Florida International University, USA	amadanay@fiu.edu		1-6
Wolfgang	Mathis	Leibniz University Hannover, Germany	mathis@tet.uni-hannover.de	Fellow	8
Fernando Gehm	Moraes	Pontifical Catholic University of Rio Grande do Sul, Brazil	fernando.moraes@puccs.br	Senior Member	9
Josef A.	Nossek	Tech. Univ. München, Germany	josef.a.nossek@tum.de	Life Fellow	8
Vasileios	Ntinas	Tech. Univ. Dresden, Germany	vasileios.ntinas@tu-dresden.de	Member	8
Tokunbo	Ogunfunmi	Santa Clara Univ., USA	togunfunmi@scu.edu	Senior Member	1-6
Ravi	Ramachandra n	Rowan University, USA	ravi@rowan.edu	Senior Member	1-6
Ricardo	Reis	Federal University of Rio do Grand Sul, Brazil	reis@inf.ufrgs.br	Senior Member	9
Robert	Rieger	Kiel University, Germany	rri@tf.uni-kiel.de	Senior Member	8
Mst Shamim Ara	Shawkat	Florida International Univ., USA	mshawkat@fiu.edu		1-6
Carlos	Silva- Cardenas	Pontificia Universidad Católica del Perú	csilva@puccp.edu.pe	Senior Member	9
Georgios	Sirakoulis	Democritus Univ. of Thrace, Greece	gsirak@ee.duth.gr	Senior Member	8
Yinan	Sun	Tsinghua University, China	sunyinan@tsinghua.edu.cn	Member	10
M.N.S.	Swamy	Concordia Univ. Montreal, Canada	swamy@encs.concordia.ca	Fellow	7
Yap-Peng	Tan	National University of Singapore, Singapore	EYPTan@ntu.edu.sg	Fellow	10
Tuna	Tarim	Texas Instruments Univ. Athens, Greece	tuna@ti.com		1-6
Sergios	Theodoridis	Univ. Athens, Greece	stheodor@di.uoa.gr	Life Fellow	10
Ljiljana	Trajkovic	Simon Fraser University	ljilja@cs.sfu.ca	Life Fellow	7
Joos	Vandewalle	Kath Univ Leuven, Belgium	Joos.Vandewalle@gmail.com	Life Fellow	8
Joerg	Velten	University of Wuppertal, Germany	velten@uni-wuppertal.de	Senior Member	8

Srinivasa	Vemuru	Ohio Northern University, USA	s-vemuru@onu.edu		1-6
Chamith Abewardana	Wijenayake	Univ. Queensland, Australia	c.wijenayake@uq.edu.au		10
Yongxiang	Xia	Hangzhou Dianzi University, China	xiayx@hdu.edu.cn	Senior Member	10
Lu	Yu	Zhejiang University, China	yul@zju.edu.cn	Senior Member	10
Fakhrul	Zaman Rokhani	Universiti Putra Malaysia	fzr@upm.edu.my	Member	10

Geographical distribution of TC/SIG members (percentage of total)

	2025	
	Total Number of Members	Rate (%)
Total number of TCs	52	100
Regions 1 – 6 (U.S.A.)	15	28.8
Region 7 (Canada)	4	7.7
Region 8 (Europe/Africa, Middle East)	17	32.7
Region 9 (Central/South America)	5	9.6
Region 10 (Asia/Pacific)	11	21.2

Gender distribution of TC/SIG members (percentage of total)

	2025	
	Total Number of Members	Rate (%)
Total number of TCs	52	100
Male	41	78.8
Female	11	21.2

Distribution of TC/SIG members by affiliation (percentage of total)

	2025	
	Total Number of Member	Rate (%)
Total number of TCs	52	100
Academia	51	98
Industry	1	2
Government	0	0

3. Accomplished Technical Activities

3.1. IEEE Conference/Event organizations

(First priority, please highlight conference/events technically and financially co-sponsored by the CAS Society)

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Yongxiang Xia	IEEE CASS	IEEE ISCAS 2024	Review Committee Member, Session Chair

Yong Lian	IEEE CASS	IEEE BioCAS 2024	General Chair
Yong Lian	IEEE CASS	2nd IEEE Standards Workshop on AI for Healthcare	General Chair
Jiaying Liu	IEEE CASS	IEEE International Conference on Multimedia & Expo (ICME) 2024	Grand Challenge Chair
Jiaying Liu	IEEE CASS	IEEE International Conference on Multimedia & Expo (ICME) 2025	Workshop Chair
Joerg Velten	IEEE CASS	IEEE ISCAS 2025	
Carlos Silva-Cardenas	IEEE CASS	IEEE LASCAS 2025	Member, Steering Committee
Robert Rieger	IEEE CASS	IEEE ISCAS 2025	Co-Chair, Young Researcher Development
Robert Rieger	CASS, EMBS, ISSC	IEEE BioCAS 2024	Co-Chair, Anniversary Committee
Peter Kennedy	IEEE CASS	IEEE ISCAS 2025	Plenary Chair, Industry Track
Tokunbo Ogunfunmi	IEEE CASS	IEEE ISCAS 2025	Review Committee Member
Ibrahim Elfadel	CASS, EMBS, ISSC	IEEE BioCAS 2024	Technical Program Co-chair, Workshop on Medical Wearables (Co-organizer and Co-Chair)
Ibrahim Elfadel	IEEE CASS	IEEE ISCAS 2025	Review Committee Member
Ibrahim Elfadel	IEEE CASS	IEEE AICAS 2024	Publication Chair
Fakhrul Zaman Rokhani	IEEE CASS	IEEE ISCAS 2024	Embedded Workshop Chair
Fakhrul Zaman Rokhani	IEEE CASS	IEEE APCCAS2024	Special Session Co-Chair
Ljiljana Trajkovic	IEEE CASS	IEEE ISCAS 2025	Education in Circuits and Systems, Track Chair
Vasileios Ntinias	IEEE CASS	IEEE ISCAS 2025	Review Committee Member

(Second priority, please highlight conference/events technically by the CAS Society)

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Carlos Silva-Cardenas	IEEE CASS	CASTOUR 2024: Group of conferences in Argentina, Bolivia, Costa Rica, El Salvador, Guatemala, and Peru	Organized conferences (4-5 in each country) and presented opportunities and benefits of joining CASS
Vasileios Ntinias	IEEE CASS Germany Chapter	International Conference on Modern Circuits and Systems Technologies (MOCAST)	Special Session Chair; Registration Chair
Vasileios Ntinias	IEEE CASS, IEEE CEDA	International Conference of Synthesis, Modeling, Analysis and Simulation Methods, and Applications to Circuits Design (SMACD)	Program Committee Member

Please don't report conference/events that are NOT sponsored by the CAS Society. Thank you!

3.2. IEEE Journal Editorships:

(Please highlight the journals that are (co-)sponsored by the CAS Society, cf., <https://iee-cas.org/publications>)

Your Name	Journal Sponsors	Journal Title	Your Role
Yongxiang Xia	IEEE CASS	IEEE Open Journal of Circuits and Systems (OJCAS)	Associate Editor
Jiaying Liu	IEEE CASS	IEEE Trans. Circuits Systems for Video Technology	Associate Editor
Zhibo Chen	IEEE CASS	IEEE TCSVT	Senior Associate Editor
Robert Rieger	IEEE CASS	IEEE Transactions Biomedical Circuits & Systems (TBCAS)	Associate Editor
Ibrahim Elfadel	IEEE CASS	TCASAI	Associate Editor
Fakhrul Zaman Rokhani	IEEE CASS	TCAS-I	Senior Associate Editor

Please don't report journals that are NOT sponsored by the CAS Society. Thank you!

3.3. Awards, Honors, and Recognition

(Fellow, Distinguished Lecturer, Outstanding Service, Best Paper Awards, and so on by the CAS Society)

Your Name	Awards / Honors / Recognition	Period
Jiaying Liu	IEEE Fellow	2025
Robert Rieger	Best Paper Award in the IEEE 36th Int. Conf. Microelectronics, Doha, Qatar	2024
Yong Lian	IEEE CAS Meritorious Service Award	2024
Zhibo Chen	IEEE TCSVT Best Paper Award	2025

3.4. Keynote Speeches/Invited Talks:

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Peter Kennedy		NXP 2XP Global R&D Webinar	Prediction and Mitigation of Spurs in Fractional Synthesizers	4 March 2025
Tokunbo Ogunfunmi		IEEE 2025 LASCAS Conference	Introduction to DGMs, GANs and VAEs with Applications in Deep Learning	February 2025
Ibrahim Elfadel	Half-Day Tutorial	ISCAS 2024	Hardware Security for Biomedical Circuits and System	May 19, 2024
Ibrahim Elfadel	Half-Day Tutorial	AICAS 2024	Accelerating AI on Heterogeneous Computing Platforms Using OpenCL	April 22, 2024
Ibrahim Elfadel	Prof. Zhou Shijie, UESTC, Chengdu, China	Invited Seminar	OSmuS: An Open-Source Platform for Microservice Prototyping with Applications to Microservice Resource Allocations	April 26, 2024
Ibrahim Elfadel	Prof. M. Sawan, Westlake University, Hangzhou, China	Invited Seminar	On the Design of a Wearable Device for Continuous BodyWeight Monitoring	August 6, 2024
Ibrahim Elfadel	Prof. Yuanqin Chen, Beihang University, Beijing, China	Invited Seminar	OSHA: A Containerized CAD Tool for the Design and Analysis of Behavioral FSM Logic Locking	October 29, 2024
Fakhrul Zaman Rokhani	IEEE CASS Kenya Chapter	SSCAS Wearable Technology	Wearable Solutions for improving Older Adult's QoL	March 2024
Fakhrul Zaman Rokhani	IEEE CASS Japan Joint Chapter	International Conference on Analog VLSI Circuits (AVIC 2024)	AIML-driven EDA for Next-Generation IC Design	October 2024
Fakhrul Zaman Rokhani	IEEE Shikoku Chapter	IEEE DEICAS in Tokushima	CASS Society's Educational Programs and Initiatives	December 2024
Ljiljana Trajkovic	IEEE Past President	82nd World Science Fiction Convention, Glasgow, UK	Panel Session on Brain-Computer Interface "The thoughts you have may not be your own"	August 8, 2024
Ljiljana Trajkovic	Organizers	2024 Shenzhen Global Innovation Forum of Talents, Shenzhen, China	Data Mining and Machine Learning for Analysis of Network Traffic	October 31, 2024
Ljiljana Trajkovic	Organizers	ASPIRE×PRESTO Workshop, Muroran Institute of Technology, Muroran, Japan	Data Mining and Machine Learning for Analysis of Network Traffic	February 13, 2025
Vasileios Ntinias	Georgios Sirakoulis, DUTH, Xanthi, Greece	zcourse "Complex Systems: Synthesis and Analysis"	Stochastic Resonance on Memristor Devices	May 2025
Vasileios Ntinias	Antonio Calomadre, Antonio Rubio, UPC, Barcelona, Spain	"Neuromorphic Computing and Emerging Devices", Catedra CHIP UPC, Barcelona, Spain	Memristor Cellular Nonlinear Networks	June 2025

3.5. Other distinguished IEEE services

(For example, CAS BoG, Region/chapter leadership, TC chair/secretary)

Your Name	Organization	Position/Activities	Period
Yong Lian	IEEE Division 1	Director	2024-2025
Yong Lian	IEEE Board of Directors	Member	2024-2025
Yong Lian	IEEE TAB	Member	2024-2025
Yong Lian	IEEE FC FAOS	Member	2025

Jiaying Liu	IEEE CASS Continuing Education Committee	IEEE CASS Continuing Education Featuring Selected Conference Tutorial	2024
Joerg Velten	CASS Distinguished Lecturer Program	Selection Committee Member	
Carlos Silva-Cardenas	CASS BoG	Region 9 Member at Large	
Carlos Silva-Cardenas	IEEE CASS	LASCAS, General Chair	2026
Peter Kennedy	IEEE Awards Board	Chair	
Tokunbo Ogunfunmi	IEEE CAS Education Standing Committee	Member	2025-2026
Ibrahim Elfadel	IEEE CS	CloudCom2024, Technical Program Chair	2024
Ibrahim Elfadel	Electromagnetic Academy, IEEE APS, IEEE Photonics Society	PIERS, General Co-chair	2025
Ibrahim Elfadel	IEEE CAS, IFIP	VLSI-SoC, Technical Program Committee	2024
Fakhrul Zaman Rokhani	IEEE CASS	VP Education and Communications	2023-2024
Fakhrul Zaman Rokhani	IEEE	Steering Committee, IEEE Future Directions-Global Semiconductors	2023-2024
Ljiljana Trajkovic	IEEE Election Oversight Committee	Chair Past Chair	January 2023-December 2024 January 2023-December 2025
Ljiljana Trajkovic	IEEE Brain Technical Community TC 2.0	Steering Committee Member Chair	January 2023-December 2024 January 2025-December 2025
Ljiljana Trajkovic	IEEE Canada Awards and Recognition Committee	Member	January 2025-December 2025
Ljiljana Trajkovic	IEEE Canada Audit Committee	Member	January 2025-December 2025

4. TC Significant Technical Leadership and Innovations

Please list 5 (or less) most significant TC/SIG activities in the past year, for example, but not limited to

- (1) Established/organized new CASS journals/conferences/workshops
 - a. Please include title, scope, status (e.g., submissions, published papers)
- (2) Organized special issues in CASS journal, special sessions/tutorials in CASS conferences, satellite workshop, CASS seasonal schools, CASS industrial forums, or CASS competitions
 - a. Please include title, the guest editors/organizers, the year, and the month, the number of submissions, the number of papers published, and the impacts (e.g., the total number of citations/full text views so far or the total number of attendees)
 - i. Special Session on Circuit and Systems for Improving Older Adults Well-being (GeronCAS), Fakhrul Zaman Rokhani, Mohd Nazim Mohtar, Nur Ahmadi, 2024, November 8, 5
 - ii. CASS Sino-Malaysia Workshop, Fakhrul Zaman Rokhani, Amara Amara, Yongfu Li, 2024, December, > 50 attendees
 - iii. SEACAS Workshop, Fakhrul Zaman Rokhani, Haslina Jaafar, 2024, December, > 80 attendees
 - iv. CASS Blitz, Santhosh Miriala, Fakhrul Zaman Rokhani, 2024, April, > 500 participants
- (3) Organized new CASS initiatives
 - a. Industry-Distinguished Lecturer Program (Fakhrul Zaman Rokhani)
 - b. Continuing Education Program (Fakhrul Zaman Rokhani)
 - c. CASS Mentoring Program (Fakhrul Zaman Rokhani)
- (4) Established cross-TCs/SIGs collaborations
N/A
- (5) Awards received by the TC/SIG or the TC/SIG members
 - a. Khalifa University Service Excellence Award for 2024 (Ibrahim Elfadel)

- b. 2nd-Place Prize (5,000 USD): 2023 HelloCTF Worldwide Competition on Hardware Security, Joint Team from Khalifa University and Technology Innovation Institute led by my graduate student, Esrat Khan, University of Florida, USA, April 2024 (Ibrahim Elfadel)

5. New plans for the next year

Are there any new initiatives, workshops, journal special issues, conference special sessions, etc., that your TC or TC members are planning for the next year?

1. Flagship LASCAS 2026, symposium, preparing, in process (Carlos Silva-Cardenas)
2. Cochair of Irish bid for NEWCAS 2027 (Peter Kennedy)
3. Organize local conferences and CAS journal special issue (Tokunbo Ogunfunmi)
4. BioCAS 2025, Oct 16 - 18, Abu Dhabi, UAE, General Co-chair (Ibrahim Elfadel)