# 2023 Annual Report (June 2022 – May 2023) CASCOM Technical Committee IEEE Circuits and Systems Society

Chairman: Máire O'Neill Chair-Elect/Secretary: Chuan Zhang/Jongsung Park

# 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.

- CASCOM TC meeting (Hybrid), May 31, 2022, 12 ~ 13:00, Austin, Texas, ISCAS2022

# 2. Voting Members:

First Name	Last Name	Affiliation	Email	IEEE Grade	IEEE Region
Hassan	Aboushady	University of Pierre and Marie Curie, France	Hassan.Aboushady@lip6.fr		Region 8
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Sann		Technology, China			
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### Geographical distribution of TC/SIG members (percentage of total)

	2022
Total number of TCs	94 (100%)
Regions 1 – 6 (U.S.A.)	35 (37%)
Region 7 (Canada)	1 (1.1%)
Region 8 (Europe/Africa, Middle	16 (17%)
East)	
Region 9 (Central/South America)	1 (1.1%)
Region 10 (Asia/Pacific)	41 (44.6%)

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

	2022
Total number of TCs	94 (100%)
Male	84 (89.4%)
Female	10 (10.6%)

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

	2022
Total number of TCs	94 (100%)
Academia	83 (90.4%)
Industry	9 (9.6%)
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)

Conference Sponsors	Conference/Event Title	Your Role
IEEE CAS	ISCAS 2023	TPC Member
IEEE CAS	ISCAS 2023	RCM
IEEE CAS	SiPS 2022	TPC Member
IEEE CAS	ISCAS	RCM
IEEE CAS	ISCAS 2023	RCM, Reviewer
IEEE CAS	NorCAS 2023	TPC
IEEE CAS	A-SSCC 2023	TPC
IEEE CAS	NorCAS 2022	TPC, Reviewer
IEEE CAS	ICTA 2022	TPC
IEEE CAS	A-SSCC 2022	TPC
IEEE CAS	ISCAS 2022	Tutorial: "Analog, Mixed Signal and Power Integrated Circuits (ICs) for automotive applications and testing methodology for quality"
IEEE CAS	ISCAS 2022	Session chair for "Late Breaking Session"
IEEE CAS	NEWCAS 2022	Tutorial: "Analog, Mixed Signal and Power Integrated Circuits (ICs) for automotive applications and testing methodology for quality"
IEEE CAS	ISCAS 2023	RCM, Reviewer
IEEE CAS	IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS) 2022	Exhibition Co-Chairs
	Sponsors IEEE CAS	IEEE CAS ISCAS 2023  IEEE CAS ISCAS 2023  IEEE CAS SiPS 2022  IEEE CAS ISCAS  IEEE CAS ISCAS  IEEE CAS ISCAS 2023  IEEE CAS ISCAS 2023  IEEE CAS A-SSCC 2023  IEEE CAS ICTA 2022  IEEE CAS ISCAS 2022  IEEE CAS ICTA 2022  IEEE CAS ISCAS 2022

Yuan-Hao Huang	IEEE CAS	2022 IEEE Biomedical Circuits and Systems	Financial Chair
		Conference	
Yuan-Hao Huang	IEEE CAS	2023 IEEE International Symposium on Circuits and	TPC, Reviewers
		Systems	
Yingjie Lao	IEEE CAS	ISCAS 2023	RCM
Hanho Lee	IEEE CAS	AICAS 2022	Local Arrangement Chair
Youngjoo Lee	IEEE CAS	ISCAS 2023	RCM
			Reviewer
Youngjoo Lee	IEEE CAS	ISICAS 2023	OC Member
Youngjoo Lee	IEEE CAS	ISLPED 2023	TPC Member
Youngjoo Lee	IEEE CAS	ISOCC 2022	OC Member
			TPC Member
			Session Chair
Youngjoo Lee	IEEE CAS	A-SSCC 2022	TPC Member
			Session Chair
Cheng-Hung	IEEE CAS	ISCAS 2023	RCM, Reviewer
(Dixson) Lin			
Cheng-Hung	IEEE CAS	AICAS 2023	Reviewer
(Dixson) Lin			
Weiqiang Liu	IEEE CAS	ISCAS 2023	RCM
Maire O'Neill	IEEE CAS	ISCAS 2023	Track Chair, Session Chair
Jongson Park	IEEE CAS	ISCAS 2023	RCM, Session Chair
Jongson Park	IEEE CAS	AICAS 2023	Plenary Session Chair
Pei-Yun Tsai	IEEE CAS	ISCAS 2022	Review Committee Member
Lan-Da Van	IEEE CAS	IEEE AICAS 2022	Special Session Co-Chair
Jiafeng Xie	IEEE CAS	ISCAS 2023	Review Committee
Hoyoung Yoo	IEEE CAS	ISCAS 2022	Reviewer
Hoyoung Yoo	IEEE CAS	ISOCC 2022	TPC Member, Session Chair
Hoyoung Yoo	IEEE CAS	ISOCC 2023	TPC Member
Shichao Yu	IEEE CAS	ISCAS 2023	RCM, reviewer
Xinmiao Zhang	IEEE CAS	ISCAS 2023	RCM
Xinmiao Zhang	IEEE CAS	MWCAS 2024	Track Chair
Xinmiao Zhang	IEEE CAS	ISCAS 2023	Inter Society Special Session Co-
· ·			Organiser
<u> </u>			

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

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Hanho Lee	IEEE CASS	ISOCC 2022	Special Session Co-chair
Jongson Park	IEEE CAS	ISOCC 2022	General Chair
Lan-Da Van	IEEE CAS	International SoC Design Conference (ISOCC), 2022	Technical Program Committee Co-Chair
Lan-Da Van	IEEE CAS	IEEE Nordic Circuits and Systems Conference (NORCAS), 2022	TPC Member
Jiafeng Xie	IEEE CAS	ICCAD 2022, 2023	Technical 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://ieee-cas.org/publications)

Your Name	Journal Sponsors	Journal Title	Your Role
Vanessa Chen	IEEE CAS	IEEE Transactions on Circuits and Systems I: Regular Papers (TCAS-I)	Associate Editor
Vanessa Chen	IEEE CAS	IEEE Transactions on Biomedical Circuits and Systems	Associate Editor
Vanessa Chen	IEEE CAS	IEEE Open Journal of Circuits and Systems	Guest Editor
Yong Chen, Nick	IEEE CAS	IEEE Transaction on Very Large Scale Integration (TVLSI) Systems	Associate Editor
Yong Chen, Nick	IEEE CAS	IEEE Transactions on Circuits and Systems I: Regular Papers	Guest Editor

Yong Chen,	IEEE CAS	IEEE Transactions on Circuits and Systems II: Express	Guest Editor
Nick		Briefs	
Han, Junghwan	IEEE CAS	IEEE Open Journal of Circuits and Systems	Associate Editor
Han, Junghwan	IEEE CAS	IEEE Transaction on Circuits and Systems I – Regular	Reviewer
		Papers	
Han, Junghwan	IEEE CAS	IEEE Transaction on Circuits and Systems II – Express Brief	Reviewer
Yingjie Lao	IEEE CAS	IEEE Trans. on VLSI Systems	Associate Editor
Weiiqang Liu	IEEE CAS	IEEE Trans. on Circuits and Systems I: Regular Papers	Associate Editor
Jongsun Park	IEEE CAS	IEEE CAS Magazine	Associate Editor
Jiafeng Xie	IEEE CAS	IEEE Trans. VLSI Systems	Associate Editor
Xinmiao Zhang	IEEE CAS	IEEE Open Journal of Circuits and Systems	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
Yong Chen, Nick	one of the three best Associate Editors of IEEE Transaction on Very	2022
	Large Scale Integration (TVLSI) Systems in 2021	
Yong Chen, Nick	one of the three best Reviewers of IEEE Transaction on Very Large	2022
	Scale Integration (TVLSI) Systems in 2021	
Gerald Sobelman	Distinguished Lecturer	2020-2022

# 3.4. Keynote Speeches/Invited Talks:

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Weiqiang Liu	Alberto Bosio	23rd IEEE Latin-American Test	Security Vulnerabilities and	Sep 2022
		Symposium (LATS 2022)	Countermeasures for Approximate Computing	
Weiqiang <mark>L</mark> iu	Xinran <mark></mark> Wang	16th International Conference on Solid-State and Integrated Circuit Technology	Energy Efficient approximate Computing Circuits and Systems	Oct. 2022
Maire O'Neill	Conference Chair	IEEE SoCC conference	Machine Learning & Hardware Security	6 September 2023
Gerald Sobelman	Chiang Mai University	DLP Talk	Machine Learning and Optimization for Communications and Deep Networks	September 23, 2022
Gerald Sobelman	University of Bordeaux	DLP Talk	Machine Learning and Optimization for Communications and Deep Networks	December 6, 2022

**3.5. Other distinguished IEEE services** (For example, CAS BoG, Region/chapter leadership, TC chair/secretary)

Your Name	Organization	Position/Activities	Period
Joseph	IEEE CASS	Chair	2022-2023
Cavallaro	Houston Chapter		
Joseph	IEEE Student	Faculty Advisor	2022-2023
Cavallaro	Branch at Rice U.		
Joseph	IEEE HKN Theta	Faculty Advisor	2022-2023
Cavallaro	Rho at Rice U.		
Joseph	IEEE CASS	CASS Representative to IEEE Council on Radio Frequency	2022-2023
Cavallaro		ID	
Joseph	IEEE SPS IEEE	Senior Area Editor	2022-2024
Cavallaro	Transaction on		
	Signal Processing		
Joseph	IEEE Computer	Guest Co-Editor, Special Issue on Artificial Intelligence at the	2022
Cavallaro	Society MICRO	Edge (13 papers)	
Joseph	IEEE Comsoc	TPC member	2022
Cavallaro	GLOBECOM		
Han,	CAS Daejeon	Co-chair / Establish new Daejeon chapter in 2021	2021-
Junghwan	Chapter		
Yuan-Hao	IEEE CAS	Representative of CAS Taipei Chapter in IEEE Taipei	2022.1~present
Huang		Section	-
Hanho Lee	IEEE CASS	Board of Governor (BoG)	2022-2023

Hanho Lee	IEEE CASS Seoul Chapter	Vice Chair	2022-2023
Cheng-Hung (Dixson) Lin	IEEE CTSoC	Vice-Chair/Consumer Communications Networks and Connectivity (CCN) TC	2023-2024
Cheng-Hung (Dixson) Lin	IEEE CTSoC	Vice-Chair/Wireless and Network Technologies (WNT) TC	2021-2022
Cheng-Hung (Dixson) Lin	IEEE GCCE	TPC Member	2022
Cheng-Hung (Dixson) Lin	IEEE ICCE	TPC Member	2023
Weiqiang Liu	IEEE Nanotechnology Council	Vice President-Elect for Technical Activities	2022 <mark>-</mark> 2023
Weiqiang Liu	IEEE Trans. VLSI Systems	Steering Committee Chair	2023 <mark>-</mark> 2024
Jongsun Park	IEEE CAS	CASCOM TC Secretary	2023
Jongsun Park	IEEE CAS Seoul Chapter	Finance	2022-2023
Vyasa Sai	IEEE Communications Magazine	Lead Series Editor	2019 - present
Vyasa Sai	IEEE Communications Magazine	Lead FT Development	2023 -present
Vyasa Sai	IEEE Access	Associate Editor	2017 -present
Vyasa Sai	IEEE Transaction on Industrial Informatics	Guest Editor	2022
Vyasa Sai	IEEE Smart Cities Newsletter	Guest Editor	2022
Pei-Yun Tsai	IEEE Asian Solid- State Circuits Conference	TPC Co-Chair	2023
Pei-Yun Tsai	IEEE CASS	Taipei Chapter Vice-Chair	2021-2022
Lan-Da Van	IEEE Transactions on Emerging Topics in Computing	Associate Editor	2022/01~Present
Lan-Da Van	ACM Computing Surveys	Associate Editor	2020/01~Present
Lan-Da Van	IEEE (MCSoC), 2022. (Sponsor: IEEE CS)	Program Co-Chair	2022
Xinmiao Zhang	IEEE CAS	VP Technical Activities	2023
Xinmiao Zhang	Zhang IEEE Comsoc Data Storage TC Chair		2022

# 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, 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)
- (3) Organized new CASS initiatives
- (4) Established cross-TCs/SIGs collaborations
- (5) Awards received by the TC/SIG or the TC/SIG members

### 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?

 Yuan-Hao Huang: Co-organization of IEEE 2024 Asian Pacific Conference on Circuits and Systems (APCCAS) (Proved), Financial Chair.