

2021 Annual Report (June 2020 – May 2021)

Nonlinear Circuits and Systems Technical Committee

IEEE Circuits and Systems Society

Chair: Elena Blokhina
 Chair elect: Marco Storace
 Secretary: Federico Bizzarri

1. Technical Committee Meeting(s):

The Nonlinear Circuits and Systems Technical Committee in the IEEE Circuits and Systems Society organizes one annual TC meeting in ISCAS. The detailed Information is given as follows. The minutes of the last TC meeting, which was held virtually on 2nd November 2020, can be found at <https://iee-cas.org/file/391458/download>
 Thirty-two members of the TC attended the meeting, corresponding to an attendance rate of 28% (there were seventy-seven members of the TC in 2020-2021).

2. Voting Members:

First Name	Last Name	Affiliation	Email	IEEE Grade	IEEE Region
Isaac Palliath	Abraham	Intel Corporation	isaac.abraham@intel.com	IEEE Senior Member	R6
Tommaso	Addabbo	University of Siena	addabbo@dii.unisi.it	IEEE Member	R8
Jens	Anders	Ulm University	ens.anders@uni-ulm.de	IEEE Senior Member	R8
Soumitro	Banerjee	IISER Kolkata	soumitro.banerjee@gmail.com	IEEE Fellow	R10
Federico	Bizzarri	Politecnico di Milano	federico.bizzarri@polimi.it	IEEE Senior Member	R8
Elena	Blokhina	University College Dublin	elena.blokhina@ucd.ie	IEEE Senior Member	R8
Sergio	Callegari	University of Bologna	sergio.callegari@unibo.it	IEEE Senior Member	R8
Guanrong (Ron)	Chen	City University of Hong Kong	gchen@ee.cityu.edu.hk	IEEE Fellow	R10
Xiang	Chen	University of Windsor	xchen@uwindsor.ca	IEEE Member	R7
Chi Tsun (Ben)	Cheng	RMIT University	ben.cheng@rmit.edu.au	IEEE Senior Member	R10
Alessandro	Colombo	Politecnico di Milano	alessandro.colombo@polimi.it	IEEE Senior Member	R8
Danilo	Comminiello	Sapienza University of Rome	danilo.comminiello@uniroma1.it	IEEE Senior Member	R8
Fernando	Corinto	Politecnico di Torino	fernando.corinto@polito.it	IEEE Senior Member	R8
Mario	Di bernardo	Università degli Studi di Napoli Federico II	mario.dibernardo@unina.it	IEEE Fellow	R8
Dawei	Ding	Anhui University	dwding@ahu.edu.cn	IEEE Member	R10
Manuel	Dominguez-pumar	Technical University of Catalonia	manuel.dominguez@upc.edu	IEEE Senior Member	R8
Abdelali	El aroudi	Universitat Rovira i Virgili	abdelali.elaroudi@urv.cat	IEEE Senior Member	R8
Ahmed	Elwakil	University of Sharjah	elwakil@ieee.org	IEEE Senior Member	R8
Tetsuro	Endo	Meiji University	ndoh@isc.meiji.ac.jp	IEEE Senior Member	R10
Orla	Feely	University College Dublin	orla.feely@ucd.ie	IEEE Fellow	R8
Tyrone Lucius	Fernando	University of Western Australia	tyrone.fernando@uwa.edu.au	IEEE Senior Member	R10
Todd	Freeborn	The University of Alabama	tjfreeborn1@eng.ua.edu	IEEE Member	R3

Dimitri	Galayko	Université Pierre et Marie Curie	dimitri.galayko@lip6.fr	IEEE Member	R8
Zbigniew	Galias	AGH-University of Science and Technology	zbigniew.galias@agh.edu.pl	IEEE Senior Member	R8
Damian	Giaouris	Newcastle University	damian.giaouris@newcastle.ac.uk		R8
Marco	Gilli	Politecnico di Torino	arco.gilli@polito.it	IEEE Fellow	R8
Izzet Cem	Goknar	Işık University	cem.goknar@isikun.edu.tr	IEEE Life Fellow	R8
Giuseppe	Grassi	Università del Salento	giuseppe.grassi@unisalento.it	IEEE Senior Member	R8
Michael	Green	University of California Irvine	mgreen@uci.edu	IEEE Senior Member	R6
Ho-Ching (Herbert)	Iu	The University of Western Australia	herbert@ee.uwa.edu.au	IEEE Senior Member	R10
Alex Pappachen	James	Indian Institute of Information Technology and Management	a.james@iiitmk.ac.in	IEEE Senior Member	R10
Brendan	Hayes	Dublin City University	brendan.hayes@dcu.ie	IEEE Member	R8
He	Di	Shanghai Jiao Tong University	dihe@sjtu.edu.cn	IEEE Senior Member	R10
Amit	Jha	Integrated Device Technology	ajha@ieee.org	IEEE Member	R6
Guo-Ping	Jiang	Nanjing University of Posts & Telecommunications	jianggp@njupt.edu.cn	IEEE Senior Member	R10
Michael Peter	Kennedy	University College Dublin	eter.kennedy@ucd.ie	IEEE Fellow	R8
Ljupco	Kocarev	Macedonian Academy of Sciences and Arts	lkocarev@manu.edu.mk	IEEE Fellow	R8
Géza	Kolumbán	Pázmány Péter Catholic University	kolumban@itk.ppke.hu	IEEE Fellow	R8
Francis	Lau	Hong Kong Polytechnic University	francis-cm.lau@polyu.edu.hk	IEEE Fellow	R10
Adrian	Leuciuc	Cadence Design Systems	aleuciuc@cadence.com	IEEE Senior Member	R2
Henry	Leung	University of Calgary	eungh@ucalgary.ca	IEEE Fellow	R7
Xiang	Li	Fudan University	lix@fudan.edu.cn	IEEE Senior Member	R10
Daniele	Linaro	Politecnico di Milano	daniele.linaro@polimi.it		R8
Wing-Kuen	Ling	Guangdong University of Technology	yongquanling@gdut.edu.cn	IEEE Senior Member	R10
Matteo	Lodi	University of Genoa	matteo.lodi@unige.it	IEEE Member	R8
Wolfgang	Mathis	Leibniz University Hannover	mathis@tet.uni-hannover.de	IEEE Fellow	R10
Ahmed	Madian	Nile University	amadian@nu.edu.eg	IEEE Senior Member	R8
Dinesh	Mehta	Colorado School of Mines	dmehta@mines.edu	IEEE Senior Member	R5
Erivelton Geraldo	Nepomuceno	Federal University of São João del-Rei	nepomuceno@ufsj.edu.br	IEEE Member	R9
Yoshifumi	Nishio	Tokushima University	nishio@ee.tokushima-u.ac.jp	IEEE Senior Member	R10
Maciej J.	Ogorzalek	Jagiellonian University	Maciej.Ogorzalek@uj.edu.pl	IEEE Fellow	R8

Alberto	Oliveri	University of Genoa	alberto.oliveri@unige.it		R8
Fabio	Pareschi	Politecnico di Torino	fabio.pareschi@polito.it	IEEE Senior Member	R8
Marcus	Prochaska	Ostfalia University of Applied Sciences	m.prochaska@ostfalia.de		R8
Costas	Psychalinos	University of Patras	cpsychal@upatras.gr	IEEE Senior Member	R8
Zhihai	Rong	University of Electronic Science and Technology of China	rongzh@gmail.com	IEEE Member	R10
Hiroo	Sekiya	Chiba University	ekiya@faculty.chiba-u.jp	IEEE Senior Member	R10
Neslihan Serap	Sengor	Istanbul Technical University	sengorn@itu.edu.tr		R8
Gianluca	Setti	Politecnico di Torino	gianluca.setti@polito.it	IEEE Fellow	R8
Francesco	Sorrentino	University of New Mexico	fsorrent@unm.edu	IEEE Senior Member	R6
Marco	Storace	University of Genoa	marco.storace@unige.it	IEEE Senior Member	R8
Jitao	Sun	Tongji University	sunit@sh163.net		R10
Kangkang	Sun	Harbin Institute of Technology	angkangsun2010@gmail.com	IEEE Member	R10
Johan	Suykens	Katholieke Universiteit Leuven	johan.suykens@esat.kuleuven.be	IEEE Fellow	R8
Norikazu	Takahashi	Okayama University	takahashi@okayama-u.ac.jp	IEEE Member	R10
Wallace K.S.	Tang	City University of Hong Kong	kstang@ee.cityu.edu.hk	IEEE Senior Member	R10
Krishnaiyan	Thulasiraman	University of Oklahoma	thulasi@ou.edu	IEEE Life Fellow	R6
Ljiljana	Trajkovic	Simon Fraser University	ljilja@cs.sfu.ca	IEEE Life Fellow	R7
Chi Kong (Michael)	Tse	Hong Kong Polytechnic University	michael.tse@polyu.edu.hk	IEEE Fellow	R10
Tetsushi	Ueta	Tokushima University	ueta@tokushima-u.ac.jp	IEEE Senior Member	R10
Yoko	Uwate	Tokushima University	uwate@ee.tokushima-u.ac.jp	IEEE Senior Member	R10
Lipo	Wang	Nanyang Technological University	elpwang@ntu.edu.sg	IEEE Senior Member	R10
Xiaofan	Wang	Shanghai Jiaotong University	xfwang@shu.edu.cn	IEEE Senior Member	R10
Jiajing	Wu	Sun Yat-sen University	wujiajing@mail.sysu.edu.cn	IEEE Senior Member	R10
Yongxiang	Xia	Zhejiang University	xiayx@ieee.org	IEEE Senior Member	R10
Mustak Erhan	Yalcin	Istanbul Technical University	mustak.yalcin@itu.edu.tr	IEEE Senior Member	R8
Wei Xing	Zheng	University of Western Sydney	w.zheng@uws.edu.au	IEEE Fellow	R10

Geographical distribution of TC members (percentage of total)

	2020
Total number of TCs	100% (77)
Regions 1 – 6 (U.S.A.)	10.4% (8)
Region 7 (Canada)	3.9% (3)
Region 8 (Europe/Africa, Middle East)	46.8% (36)
Region 9 (Central/South America)	1.3% (1)
Region 10 (Asia/Pacific)	37.6% (29)

Gender distribution of TC members (percentage of total)

	2020
Total number of TCs	100% (77)
Male	92.2% (71)
Female	7.8% (6)

Distribution of TC members by affiliation (percentage of total)

	2020
Total number of TCs	100% (77)
Academia	96% (74)
Industry	4% (3)
Government	0

3. Accomplished Technical Activities

3.1. IEEE Conference/Event organizations

Conference/events are technically and financially co-sponsored by the CAS Society

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Wing-Kuen Ling	IEEE CAS	IEEE International Conference on Visual Communications and Image Processing	Organizer of Special Session
Hiroo Sekiya	IEEE CAS	2021 IEEE International Symposium on Circuits and Systems (ISCAS)	Tutorial Co-Chairs
Fabio Pareschi	IEEE CAS	2021 IEEE International Symposium on Circuits and Systems (ISCAS)	Track chair
Erivelton Nepomuceno	IEEE CAS	2021 IEEE International Symposium on Circuits and Systems (ISCAS)	Track chair
Alberto Oliveri	IEEE CAS	IEEE International Conference on Electronics, Circuits and Systems (ICECS)	Social media chair
Yoko Uwate	IEEE CAS	2021 IEEE International Symposium on Circuits and Systems (ISCAS)	WiCAS/DIC Co-Chairs
Elena Blokhina	IEEE CAS	IEEE IEEE International Symposium on Integrated Circuits and Systems (ISICAS) 2021	Programme Co-Chair
Elena Blokhina	IEEE CAS	IEEE IEEE International Symposium on Integrated Circuits and Systems (ISICAS) 2021	Special Session Co-Chair
Elena Blokhina	IEEE CAS	IEEE International Conference on Electronics, Circuits and Systems (ICECS) 2020 in Glasgow, UK	General Co-Chair
Di He	IEEE CAS	IEEE CASS SSJW 2020 (Shanghai-Shikoku Joint Workshop)	Organizer/Finance
Ahmed Madain	NILES, Nile university and IEEE CAS Egypt section	2nd Novel Intelligent and Leading emerging sciences	Technical program chair
Federico Bizzarri	IEEE CAS	IEEE International Conference on Electronics, Circuits and Systems (ICECS) 2020 in Glasgow, UK	Track Chair
Ahmed Madain	IEEE CAS	ICECS 2021, Duabi	Entrepreneurial Program Chair
Ahmed Madain	IEEE CAS	ICM 2020, Jordan	Program chair

Jiajing Wu	IEEE CAS	IEEE IEEE International Symposium on Integrated Circuits and Systems (ISICAS) 2021	Special session organizer
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3.2. IEEE Journal Editorships:

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

Your Name	Journal Sponsors	Journal Title	Your Role
Zbigniew Galias	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Xiang Li	IEEE CAS	IEEE Circuits and Systems Society Newsletters	Associate Editor
Chi-Tsun (Ben), Cheng	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Chi-Tsun (Ben), Cheng	IEEE CAS	Circuits and Systems Society Newsletter	Associate Editor
Fabio Pareschi	IEEE CAS	OJCAS	Associate Editor
Fabio Pareschi	IEEE CAS	TCAS-II – special issue on ISCAS 2021 papers	Guest Editor
Yoshifumi Nishio	IEEE CAS	IEEE Circuits and Systems Society Newsletter	Associate Editor
Herbert Iu	IEEE CAS	IEEE Journal on Emerging and Selected Topics in Circuits and Systems	Associate EIC
Herbert Iu	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Ahmed Elwakil	IEEE CAS	IEEE Transactions on Circuits and Systems I	Associate Editor
Alberto Oliveri	IEEE CAS	IEEE Transactions on Circuits and Systems I	Associate Editor
Mustak Erhan Yalcin	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Jiajing Wu	IEEE CAS	IEEE Transactions on Circuits and Systems II	Associate Editor
Henry Leung	IEEE CAS	IEEE Circuits and Systems Magazine	Associate Editor
Elena Blokhina	IEEE CAS	IEEE Transactions on Circuits and Systems I	Deputy Editor in Chief
Daniele Linaro	IEEE CAS	IEEE Open Journal of Circuits and Systems	Associate Editor
Gianluca Setti	Politecnico di Torino	Editor-in-Chief, Proceedings of the IEEE	2019-2021
Ljiljana Trajkovic	IEEE Communications Society, IEEE CAS Society	IEEE Transactions on Network Science and Engineering, Special Issue on Network of Cyber-Social Networks: Modeling, Analysis, and Control, June	Guest Associate Editor (with Xiang Li), Apr.-June 2020
Yongxiang Xia	IEEE CAS	IEEE Trans. Circuits and Systems II	Associated Editor
Federico Bizzarri	IEEE CAS	IEEE Open Journal of Circuits and Systems	Associate Editor
Federico Bizzarri	IEEE CAS	IEEE Open Journal of Circuits and Systems – Special Section “Nonlinear Fractional Order Circuits and Systems”	Guest Associate Editor

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
Costas Psychalinos	S. Kapoulea, C. Psychalinos, and A. S. Elwakil, “Simple Implementations of the Cole-Cole Models”, IEEE Conference in Novel Intelligent and Leading Emerging Sciences (NILES 2020), October 24-26, 2020, Giza, Egypt, pp. 99-102. Awarded as 3rd Best Student Paper in the IEEE Conference in Novel Intelligent and Leading Emerging Sciences (NILES 2020) Cairo, Egypt, October 2020.	2020
Francis C.M. Lau	Fellow of IEEE	2021
Di He	IEEE CASS SSJW 2020 Best Paper Award	November 2020
Ljiljana Trajkovic	Distinguished Lecturer	2021 - 2022

3.4. Keynote Speeches/Invited Talks:

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Erivelton Nepomuceno	St. Petersburg Electrotechnical University	Seminars of Postgraduate Program	Computer Arithmetic for Complex Networks	01/10/2020
Peter Kennedy	Pieter Harpe	Advances in Analog Circuit Design (AACD) 20/21	Recent Advances in Fractional-N Frequency Synthesis	29 March 2021

Johan Suykens		Keynote talk at IEEE World Congress on Computational Intelligence (WCCI-IJCNN 2020)	"Deep Learning, Neural Networks and Kernel Machines: new synergies"	July 202
Amit Jha	MTT, Santa Clara Valley, CA	Monthly webinar	Area Efficient High-Performance Voltage Controlled Oscillators In Nano-Scale CMOS	4/15/2020
Amit Jha	ECE, Vignan University, India	Guest Lecture	High-performance Integrated Oscillators for internet -of-things	7/8/2020
Ahmed Madain	IEEE Egypt Section	19th International Conference on Aerospace Sciences & Aviation Technology (ASAT-19), Military Technical College, Cairo, Egypt	Emerging technology of fractional systems	6-8 April 2021
Chai Wah Wu	Ángel Rodríguez-Vázquez, Manuel Delgado-Restituto and Eduard Alarcón	ISCAS 2020	Simplifying Deep Neural Networks via Look-up Tables and Product of Sums Matrix Factorizations	Oct. 2020
Ljiljana Trajkovic	IEEE CASS Chapter, Indonesia Section	CAS Society Distinguished Lecture	"Data mining and machine learning for analysis of network traffic"	April 26, 2021
Ljiljana Trajkovic	ICCAE 2021 Conference Organizers	13th International Conference on Computer and Automation Engineering, Melbourne, Australia (keynote talk)	"Detecting Internet worms, ransomware, and blackouts using recurrent neural networks"	March 21, 2021
Ljiljana Trajkovic	Prof. Chunhua Yang	Central South University, Changsha, China (invited talk)	"Detecting Internet worms, ransomware, and blackouts using recurrent neural networks"	February 6, 2021
Ljiljana Trajkovic	ICBDE 2021 Conference Organizer's	The 4th International Conference on Big Data and Education (keynote talk)	"Detecting Internet worms, ransomware, and blackouts"	February 4, 2021
Ljiljana Trajkovic	Prof. Celia Shahnaz	WIECON-ECE 2020 (keynote talk)	"Detecting Internet worms, ransomware, and blackouts"	December 25, 2020
Ljiljana Trajkovic	Prof. Celia Shahnaz	ICECE 2020 (keynote talk)	"Detecting Internet worms, ransomware, and blackouts"	December 17, 2020
Ljiljana Trajkovic	Prof. Wei Zhu	International Workshop on Complex Systems and Networks (IWCSN 2020) (invited talk)	"Detecting Internet worms, ransomware, and blackouts"	October 24, 2020
Ljiljana Trajkovic	ICICM 2020 Conference Organizers	2020 IEEE 5th International Conference on Integrated Circuits and Microsystems (keynote talk)	"Detecting network anomalies and intrusions"	October 24, 2020
Ljiljana Trajkovic	IEEE SMC Society Chapter, Malaysia Section	IEEE SMC Society Distinguished Lecture	"Data mining and machine learning for analysis of network traffic"	October 23, 2020
Ljiljana Trajkovic	CoCoNet'20 Conference Organizers	Fourth International Conference on Computing and Network Communications (keynote talk)	"Detecting network anomalies and intrusions,"	October 16, 2020
Ljiljana Trajkovic	Prof. Ildar Batyrshin	16th Mexican International Conference on Artificial Intelligence (keynote talk)	"Machine learning techniques for detecting network anomalies"	October 15, 2020
Ljiljana Trajkovic	ICEBI 2020 Conference Organizers	2020 4th International Conference on E-Business and Interne	"Complex networks"	October 10, 2020
Ljiljana Trajkovic	Prof. Yingxu Wang	19th IEEE International Conference on Cognitive Informatics and Cognitive Computing (keynote talk)	"Complex networks"	September 26, 2020
Ljiljana Trajkovic	Prof. Cemal Dolicanin	6th International Conference Contemporary Problems of Mathematics, Mechanics and Informatics (invited talk)	"Detecting network anomalies and intrusions"	September 21, 2020
Ljiljana Trajkovic	Prof. Rodolfo Fiorini	Global Transformative Leadership in the 21st Century: A Science, Engineering, Technology Integrated and Strategic Perspective (invited talk)	"Global Leadership in the 21st Century"	June 16, 2020

3.5. Other distinguished IEEE services

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

Your Name	Organization	Position/Activities	Period
Storace Marco	NCAS TC	Chair-elect	May 2019 - May 2021
Hiroo Sekiya	CASS IEEE	CAS BoG	2020-2022
Hiroo Sekiya	IEEE PELS Japan Joint Chapter	Secretary	2020-2021
Orla Feely	CASS IEEE	Member of the CASS Vitold Belevitch Circuits and Systems Award Subcommittee	2019-2021
Erivelton Nepomuceno	IEEE	Student Branch – Counselor	June 2020 to Dec 2020
Yoshifumi Nishio	IEEE CAS Society	Vide-President for Regional Activities and Membership	2018.1 – 2021.12
Amit Jha	Santa Clara Valley, CAS	Chair	2020-present
Yoko Uwate	IEEE CAS	CAS BoG	2021-2024
Yoko Uwate	IEEE CAS	WiCAS chair	2021
Yoko Uwate	IEEE CAS-NSA TC	Chair	2019-2021
Elena Blokhina	Technical Committee on Nonlinear Circuits and Systems	Chair	2019 – current
Elena Blokhina	University College Dublin IEEE Student Branch and IEEE CAS Student Branch Chapter	Counsellor	2017 – current
Elena Blokhina	Circuits and Systems Society	Darlington Best paper Award committee member	2020/2021
Elena Blokhina	Circuits and Systems Society	Guillemin-Cauer Best Paper Award committee	2020/2021
Elena Blokhina	Circuits and Systems Society	Chapter of the Year Award and Regional Chapter of the Year Award Committee	2020/2021
Di He	IEEE CASS Shanghai Chapter	Secretary/Finance	Jan. 2020 – Dec. 2021
Henry Leung	IEEE SMC	Co-chair Technical Committee on Brain-inspired Cognitive System	2018-present
Gianluca Setti	IEEE Fellow Committee	Member	2018-2020
Gianluca Setti	IEEE Governance Committee	Member	2018-2020
Gianluca Setti	IEEE Publication Services and Products Board (PSPB)	Member	2019-2021
Gianluca Setti	IEEE PSPB Strategic Planning Committee	Member	2020
Gianluca Setti	Joint IEEE PSPB/TAB Committee on Publication Sinergy	Member	2020
Ahmed Madain	IEEE CAS Egypt Technical chapter	Chair	2020-2022
Ahmed Madain	IEEE Egypt section	Treasure / Secretary	2020-2022
Chai Wah Wu	CASS	DLP selection committee	2020-2021
Chai Wah Wu	CASS	DLP selection committee	2021-2022
Ljiljana Trajkovic	IEEE	Member, IEEE Election Oversight Committee	2021
Ljiljana Trajkovic	IEEE CAS Society	Member, IEEE CASS Meritorious Service Award Sub-Committee	2020 - 2021
Ljiljana Trajkovic	IEEE	Chair, IEEE Gustav Robert Kirchhoff Award Committee	2020 - 2021
Ljiljana Trajkovic	IEEE	Member, IEEE Tellers Committee	2020 - 2021
Ljiljana Trajkovic	IEEE	Member, IEEE History Committee	2020 - 2021

Ljiljana Trajkovic	IEEE	Member, IEEE Technical Activities Board, Nominations and Appointments Committee	2020 - 2021
Ljiljana Trajkovic	IEEE	Member, Financial Transparency ExCom	2018 - 2021
Ljiljana Trajkovic	IEEE CAS Society	Chair, IEEE Circuits and Systems Society joint Chapter of the Vancouver/Victoria Sections	2001 - 2021
Ljiljana Trajkovic	IEEE	Division X Delegate/Director	2019 - 2020
Ljiljana Trajkovic	IEEE SMC Society	Vice-Chair, IEEE Control Systems Society, Robotics and Automation Society, and Systems, Man, and Cybernetics Society Chapter of the Vancouver Section	2011 - present
Ljiljana Trajkovic	IEEE Simon Fraser University Student Branch	Mentor	2008 - present
Storace Marco	NCAS TC	Secretary	May 2019 - May 2021

5. TC Significant Technical Leadership and Innovations

1) Prof. Michael Peter Kennedy was awarded the Doctor of Science (Engineering) (Honoris Causa) degree by the Queen's University of Belfast.

2) Prof. Di He was an organizer of the IEEE CASS SSJW 2020 (Shanghai-Shikoku Joint Workshop). The CASS Shanghai Chapter and Shikoku Chapter have co-organized IEEE CASS Shanghai and Shikoku Chapters Joint Workshop on Circuits and Systems (SSJW) annually from 2007. We believe that this joint workshop is a very unique event organized by two of CASS chapters located in different countries and has been very successful to stimulate the chapters' activities as well as to raise international awareness among young students.

In 2020, we organized SSJW online (zoom) due to covid-19, on the 24th of November. After Prof. Peiling Liu, the Shanghai Chapter Chair, welcomed the attendee, 1 invited talk was delivered. Prof. Weiyao Lin of Shanghai Jiao Tong University, China, talked about "Video Object Parsing and Compression in Complex Scenes".

During the workshop, 10 presentations are given by students. The organizing committee chose 6 best student papers and gave the awards. The numbers of the participants and the papers are short to the target numbers. We think that this is because the format turned into virtual.

The next SSJW is under planning to be held online or hybrid system, in 2021. Finally, we would like to appreciate to the IEEE CAS Society for supporting us to organize this event.

3) Prof. Di He, IEEE ISCAS 2021 Session Chair of Special Session "Intelligent Sensing & Interaction" In the forthcoming IEEE ISCAS 2021 which will be held in May 2021, Prof. Di He organized a special session with the title "Intelligent Sensing & Interaction", and he will be the session. In this special session, 6 papers were selected from more than 15 submissions for final presentation.

4) Prof. Ljiljana Trajkovic received the 2021 IEEE Vancouver Section Service Award, March 31, 2021

5) Prof. Ljiljana Trajkovic received the 2020 IEEE Systems, Man, and Cybernetics Society, Joseph G. Wohl Outstanding Career Award, for long term contributions to the Systems, Man, and Cybernetics Society, and IEEE, October 13, 2020.

6. TC CHARTER:

- (1) How can your TC amend the TC name/scope/charter, if the ballots are collected at a TC meeting or by internet? What is the quorum for a valid ballot? What is the required % to pass the amendment?

Our TC has had online and in person meetings, and we use the e-vote platform provided and managed by the CASS.

- Whenever voting occurs during a meeting, a quorum applies requiring at least the ceiling of one third of the regular TC members to be present at the meeting.
- When votes are organized by electronic means, a quorum applies requiring the ceiling of one-half of the regular TC members to vote.

- (2) How can your TC select the TC Chair? Does the Chair-Elect is elected 1 year or 2 years earlier? Do you allow an out-of-sequence election for the Chair (if the Chair-Elect cannot assume the role o Chair)?

- Officer roles (Chair, Chair Elect and Secretary are for 2 years). The committee members elect Chair Elect, who will become Chair automatically in two years. Every committee member can nominate Secretary and Chair Elect. The vote happens at the committee meeting associated with ISCAS every two years. We allow out of sequence elections if the Chair-Elect cannot assume the role of Chair.

(3) Does the TC have a membership structure that specifies the number of years and terms that a member can serve?

- The NCAS TC has two classes of membership: regular and affiliate. Rights of regular members include voting, proposing motions, expressing opinions at meetings and through the electronic communication means used by the TC.
- A regular member is said to be inactive if he/she did not participate in one of the listed four activities in two consecutive years. The Secretary will contact inactive members to encourage them to become active. Members who give sufficient cause for a two-year absence and yet fail to contribute for a 3rd consecutive year will automatically lose their regular member status in the TC.
- Affiliate members may be moved to the regular member status by sending a request to the Secretary including information on their qualification as active members.