

2023 Annual Report (June 2022 – May 2023)
Visual Signal Processing and Communications Technical
Committee
IEEE Circuits and Systems Society

Chairman: Zhibo Chen
Secretary: Zhu Li

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
Chen	Zhibo	University of Science and Technology China	chenzhibo@ustc.edu.cn	IEEE Senior member	Region 10
Li	Zhu	Univ of Missouri, Kansas City	lizhu@UMKC.EDU	IEEE Senior member	Region 5
Christian	Herglotz	Multimedia Communications and Signal Processing, Friedrich-Alexander University Erlangen-Nürnberg	christian.herglotz@fau.de	IEEE member	Region 8
Lap-Pui	Chau	Nanyang Technological University	elpchau@NTU.EDU.SG	IEEE Fellow	Region 10
Jin	Xin	Shenzhen International Graduate School, Tsinghua University	j.in.xin@sz.tsinghua.edu.cn	IEEE Senior member	Region 10
Jungwon	Kang	Electronics and Telecommunications Research Institute, Daejeon	jungwon@etri.re.kr	IEEE Senior member	Region 10
Jong-Ok	Kim	Korea University	jokim@korea.ac.kr	IEEE Senior member	Region 10
Li	Houqiang	University of Science and Technology of China	lihq@ustc.edu.cn	IEEE Fellow	Region 10
Daniel P.K.	Lun	The Hong Kong Polytechnic University	enpkun@POLYU.EDU.HK	IEEE Senior member	Region 10
Meng	Jingjing	University at Buffalo, The State University of New York (SUNY)	Jmeng2@buffalo.edu	IEEE Senior member	Region 1
Ioannis	Patras	Queen Mary University of London	i.pstras@qmul.ac.uk	IEEE Senior member	Region 8
Chia-Yang	Tsai	Facebook	chyatsai@me.com	IEEE Senior member	Region 6
Vladan	Velisavljevic	University of Bedfordshire	vladan.velisavljevic@beds.ac.uk	IEEE Senior member	Region 8

Wang	Meng	<u>Hefei University of Technology, Hefei, China</u>	<u>eric.mengwang@gmail.com</u>	IEEE Senior member	Region 10
Bruno	Zatt	<u>Video Technology Research Group (ViTech), Federal University of Pelotas (UFPEL), Brazil</u>	<u>zatt@inf.ufpel.edu.br</u>	IEEE Senior member	Region 9
Zheng	Wei-Shi	<u>SUN YAT-SEN UNIVERSITY</u>	<u>wszheng@ieee.org</u>	IEEE Senior member	Region 10
Byeungwoo	Jeon	<u>Sungkyunkwan University, School of Electronic and Electrical Engineering</u>	<u>bjeon@SKKU.EDU</u>	IEEE Senior member	Region 10
Carl James	Debono	<u>Department of Communications and Computer Engineering, University of Malta</u>	<u>c.debono@IEEE.ORG</u>	IEEE Senior member	Region 8
Xu	Dong	<u>University of Sydney</u>	<u>dong.xu@SYDNEY.EDU.AU</u>	IEEE Fellow	Region 10
Sun	Heming	<u>Waseda Research Institute for Science and Engineering.</u>	<u>hemingsun@ieee.org</u>	IEEE Senior member	Region 10
Hou	Junhui	<u>City University of Hong Kong</u>	<u>jh.hou@cityu.edu.hk</u>	IEEE Senior member	Region 10
Zhang	Li	<u>Bytedance Inc., San Diego, CA, USA.</u>	<u>lizhang.idm@bytedance.com</u>	IEEE Senior member	Region 6
Luciano Volcan	Agostini	<u>Federal University of Pelotas (UFPEL), Brazil.</u>	<u>agostini@inf.ufpel.edu.br</u>	IEEE Senior member	Region 9
Marek	Domanski	<u>Poznań University of Technology, Poznań, Poland</u>	<u>marek.domanski@put.poznan.pl</u>	IEEE Senior member	Region 8
Liu	Shan	<u>Tencent</u>	<u>shan@tencent.com</u>	IEEE Fellow	Region 6
Cheng	Wen-Huang	<u>National Taiwan University</u>	<u>whcheng@nctu.edu.tw</u>	IEEE Senior member	Region 10
Liu	Ying	<u>Department of Computer Science and Engineering at Santa Clara University, Santa Clara, CA, USA.</u>	<u>yliu15@scu.edu</u>	IEEE member	Region 6
Yukihiro	Bandoh	<u>NTT</u>	<u>yukihiro.bandoh@ieee.org</u>	IEEE Senior member	Region 10
Alexandre	Mercat	<u>Tampere University</u>	<u>alexandre.mercat@tuni.fi</u>	IEEE Senior member	Region 8
Debargha	Mukherjee	<u>Google LLC</u>	<u>debargha@google.com</u>	IEEE Fellow	Region 6
Daniel	Palomino	<u>Video Technology Research Group (ViTech), Federal University of Pelotas</u>	<u>dpalomino@inf.ufpel.edu.br</u>	IEEE Senior member	Region 9
Qi	Guo-Jun	<u>University of Central Florida</u>	<u>guojung@GMAIL.COM</u>	IEEE Fellow	Region 3
Chae Eun	Rhee	<u>Inha University</u>	<u>chae.rhee@inha.ac.kr</u>	IEEE Senior member	Region 10
Ye	Yan	<u>Alibaba Group US</u>	<u>yan.ye@alibaba-inc.com</u>	IEEE Senior member	Region 6
Zha	Zheng-Jun	<u>University of Science and Technology of China (USTC)</u>	<u>zhazj@ustc.edu.cn</u>	IEEE Senior member	Region 10
Zhou	Wengang	<u>University of Science and</u>	<u>zhwg@ustc.edu.cn</u>	IEEE Senior member	Region 10

		<u>Technology of China (USTC)</u>			
Alessandro	Gnutti	<u>Department of Information Engineering, University of Brescia, Italy</u>	<u>alessandro.gnutti@unibs.it</u>	IEEE Senior member	Region 8
Wen	Bihan	<u>Nanyang Technological University, Singapore</u>	<u>bihan.wen@ntu.edu.sg</u>	IEEE Senior member	Region 10
Lu	Jiwen	<u>Tsinghua University</u>	<u>lujiwen@tsinghua.edu.cn</u>	IEEE Senior member	Region 10
João	Ascenso	<u>Instituto Superior Técnico - Instituto de Telecomunicações</u>	<u>joao.ascenso@lx.it.pt</u>	IEEE Senior member	Region 8
Liu	Jun	<u>Singapore University of Technology and Design</u>	<u>Jun_liu@sutd.edu.sg</u>	IEEE Senior member	Region 10
Zhang	Lei	<u>Microsoft</u>	<u>leizhangcn@ieee.org</u>	IEEE Fellow	Region 10
Olivier Le	Meur	<u>InterDigital</u>	<u>Olivier.lemeur@interdigital.com</u>	IEEE Senior member	Region 8
Hong	Richang	<u>Hefei University of Technology</u>	<u>hongrc@hfut.edu.cn</u>	IEEE Senior member	Region 10
Wang	Shiqi	<u>City University of Hong Kong</u>	<u>shiqiwan@cityu.edu.hk</u>	IEEE Senior member	Region 10
Steven Le	Moan	<u>Colourlab, Department of Computer Science, Norwegian University of Science and Technology</u>	<u>steven.lemoan@ntnu.no</u>	IEEE Senior member	Region 8
Stuart	Perry	<u>Faculty of Engineering and IT, University of Technology Sydney</u>	<u>Stuart.Perry@uts.edu.au</u>	IEEE Senior member	Region 10
Gao	Wei	<u>Peking University</u>	<u>gaowei262@pku.edu.cn</u>	IEEE Senior member	Region 10
Wonjun	Kim	<u>Konkuk University (Seoul, Republic of Korea)</u>	<u>wonikim@konkuk.ac.kr</u>	IEEE Senior member	Region 10
Wen	Xing	<u>Kuaishou Technology</u>	<u>wenxing@kuaishou.com</u>	IEEE Senior member	Region 6

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

	2023
Total number of TCs	%
Regions 1 – 6 (U.S.A.)	18
Region 7 (Canada)	0
Region 8 (Europe/Africa, Middle East)	20
Region 9 (Central/South America)	9
Region 10 (Asia/Pacific)	53

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

	2023
Total number of TCs	%
Male	88
Female	12

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

	2023
Total number of TCs	%
Academia	84
Industry	16
Government	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
Nam Ling	IEEE CAS	ISCAS 2024, May 19-22, 2024	Technical Program Co-Chair
Shiqi Wang	IEEE CAS/Computer/ComSoc/Signal Processing	ICME International Workshop on Perception-inspired Communication and Processing for Immersive and Interactive Multimedia (PCPI2M) ICME 2023	Workshop Chair
Shiqi Wang	IEEE CAS/Computer/ComSoc/Signal Processing	IEEE Coding for Machines 2023 Workshop (ICME 2023)	Technical Program Committee
Alessandro Gnutti	IEEE CAS	IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS 2023)	Reviewer
Alexandre Mercat	IEEE CAS	ISCAS 2023	RCM
Alexandre Mercat	IEEE CAS	ISCAS 2023	Session chair
Bihan Wen	IEEE CAS	IEEE International Conference on Multimedia and Expo 2022	Area Chair
Carl James Debono	IEEE CASS, IEEE SSP, IEEE Comsoc, IEEE CS	IEEE International Conference on Multimedia and Expo (ICME) 2023	Area Chair
Carl James Debono	IEEE CASS	IEEE International Symposium on Circuits and Systems (ISCAS) 2022 and 2023	Review Committee Member
Carl James Debono	IEEE CASS	IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS) 2023	Review Committee Member
Fernando Pereira	SPIE	SPIE Conference on Applications of Digital Image Processing XLIV, San Diego, CA, USA, August 2022.	Member of the Technical Program Committee
Fernando Pereira	IEEE SPS	European Workshop on Visual Information Processing (EUVIP'2022), Lisbon, Portugal, September 2022.	General Chair
Fernando Pereira	IEEE SPS	Picture Coding Symposium (PCS'2022), San Jose, USA, December 2022.	International Liaison Chair and Member of the Steering Committee
Fernando Pereira	IEEE SPS	Int. Conference on Quality of Multimedia Experience (QoMex'2022), Lippstadt, Germany, September 2022.	Member of the Steering Committee
Fernando Pereira	IEEE COM	Brazilian Symposium on Telecommunications and Signal Processing (SBrT'2022), Santa Rita do Sapucaí, MG, Brazil, September 2022.	Member of the Technical Program Committee
Junhui Hou	IEEE CAS	IEEE VCIP 2022	Tutorial speaker
Junhui Hou	IEEE CAS	IEEE VCIP 2022	Special session co-organizer
Junhui Hou	IEEE CAS	IEEE VCIP 2022	Area Chair
Junhui Hou		IEEE ICME 2023	Area Chair
Junhui Hou		IEEE MMSP 2022	Area Chair
Junhui Hou		IEEE ICIP 2023	Area Chair
Lei Zhang	IEEE CASS	IEEE Int. Symposium on Circuits and Systems (ISCAS) 2023	Review Committee Member (RCM)
Stuart Perry	IEEE SPS	ICIP 2022	Reviewer

Wen-Hsiao PENG	IEEE CAS	2022 IEEE International Midwest Symposium on Circuits and Systems (MWCAS)	Session Chair
Wen-Hsiao PENG	IEEE CAS	2023 IEEE International Symposium on Circuits and Systems (ISCAS)	RCM Member
Wen-Hsiao PENG	IEEE CAS	2023 IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS)	RCM Member / Plenary Session Co-Chair
Chae Eun Rhee	IEEE CAS and others	AICAS 2022	Local Arrangement Co-Chairs
Heming Sun	IEEE CAS	ISCAS 2023	RCM
Li Zhang	CAS and others	ISCAS 2023 Grand Challenge Session	Organizer and co-chair
Li Zhang	CAS and others	ISCAS 2023 Grand Challenge and special session on "Neural Network-based Video Coding"	Sponsor, organizer, and session chair
Li Zhang	IEEE CAS	ICMEW 2023 "First IEEE Workshop on Coding for Machines"	TPC
Li Zhang	IEEE SPS	ICIP 2023	Reviewer
Shiliang Zhang	CAS and others	ISCAS 2023	Meta Reviewer
Shiliang Zhang	IEEE SPS	ICIP 2023	Reviewer
Shiliang Zhang	CAS and others	ISCAS 2023	Meta Reviewer
Shiliang Zhang	IEEE SPS	ICIP 2023	Reviewer
Zhibo Chen	IEEE CAS	ISCAS	Track Chair
Daniel Palomino	IEEE CAS	12th IEEE CASS Rio Grande do Sul Workshop	Program Chair
Daniel Palomino	IEEE CAS	IEEE CASS/SPS Seasonal School on Digital Processing of Visual Signals and Applications	Publicity Chair
Ichiro IDE	IEEE CAS	ICME2022	TPC member
Ichiro IDE	IEEE CAS	VCIP2022	Reviewer
Tian Sheuan Chang	IEEE CAS	ISCAS 2023	RCM, Session chair
Ying Liu	IEEE CAS	IEEE International Symposium on Circuits and Systems (ISCAS) 2023	Session Chair
Ying Liu	IEEE CAS	IEEE International Conference on Artificial Intelligence Circuits and Systems (AICAS) 2023	reviewer
Ying Liu	IEEE CAS	IEEE International Conference on Visual Communications and Image Processing (VCIP) 2022	reviewer
Ying Liu	IEEE	Picture Coding Symposium (PCS) 2022	Publicity Chair and Session chair
Zhu Li	IEEE CAS	IEEE International Conference on Multimedia and Expo 2023	General Co-Chair
Zhu Li	IEEE CAS	IEEE Visual Comm & Image Processing, 2022	Program Co-Chair
Vladan Velisavljevic	IEEE CAS	IEEE ISCAS 2023	RCM member
Xu Dong	IEEE CAS	IEEE Biometric Council's Fellow committee 2023	Member
Xu Dong	IEEE CAS	IEEE International Conference on Acoustics, Speech & Signal Processing (ICASSP), 2021-2022	Area Chair
Xu Dong	IEEE CAS	The AAAI Conference on Artificial Intelligence (AAAI), 2022-2023	Area Chair
Xu Dong	IEEE CAS	IEEE International Conference on Computer Vision (ICCV), 2023	Area Chair
Xu Dong	IEEE CAS	Lead Technical Program Coordinator: ACM Multimedia, 2024	Organizer
Wei Gao	IEEE CAS/Computer/ComSoc/Signal Processing	International Workshop on Perception-inspired Communication and Processing for Immersive and Interactive Multimedia (PCPI2M), IEEE ICME 2023	Workshop Chair
Wei Gao	IEEE CAS/Computer/ComSoc/Signal Processing	International Workshop on Immersive Media Compression (IMC), IEEE ICME 2023	Technical Program Committee
Wei Gao	IEEE CAS	Special Session on 3D Point Cloud Acquisition, Processing and Communication (3DPC-APC), IEEE VCIP 2022	Special Session Organizer
Wonjun Kim	IEEE CAS	IEEE VCIP 2023	Registration Chair
Bihan Wen	IEEE CAS	IEEE ICME 2023	Area Chair

Luciano Agostini	IEEE CAS, ACM, SBC, SBMicro	35 th Symposium on Integrated Circuits and Systems Design – SBCCI 2022	Program Chair
Luciano Agostini	IEEE CAS	14 th IEEE Latin America Symposium on Circuits and Systems – LASCAS 2023	Track Chair
Luciano Agostini	IEEE CAS	65 th IEEE International Midwest Symposium on Circuits and Systems – MWSCAS 2023	Track Chair
Luciano Agostini	IEEE CAS	56 th IEEE International Symposium on Circuits and Systems – ISCAS 2023	RCM

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

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Nam Ling	IEEE CAS	VCIP 2023, Dec 4-7, 2023	General Co-Chair
Carl James Debono	IEEE SPS	IEEE ICIP 2023	reviewer
Wen-Hsiao PENG	IEEE CAS & SPS	Picture Coding Symposium (PCS) 2024	Technical Program Co-Chair
Christian Herglotz	IEEE CAS	VCIP 2022	Reviewer
Christian Herglotz	IEEE CAS	ISCAS 2022	Area Chair
Heming Sun	IEEE CAS	Picture Coding Symposium 2022	Session Chair
Jong-Ok Kim	IEEE CAS	IEEE VCIP 2022	Area chair
Jong-Ok Kim	IEEE CAS	IEEE VCIP 2023	Special session chair
Ying Liu	IEEE CAS	IEEE International Conference on Multimedia and Expo (ICME) 2023, First IEEE Workshop on Coding for Machines	1. Workshop Organizing Committee Member Workshop Reviewer
Zhu Li	IEEE CAS	IEEE ISCAS	Special Session Co-Chair
Vladan Velisavljevic	IEEE CAS / SPS	IEEE ICIP 2023	Area Chair
Vladan Velisavljevic	IEEE CAS / SPS	IEEE ICASSP 2023	Area Chair
Bihan Wen	IEEE SPS	IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR) 2022	TPC Co-chair
Bihan Wen	IEEE CAS / SPS	IEEE ICASSP/ICIP 2023	Area Chair

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
Shiqi Wang	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	AE
Bihan Wen	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Fernando Pereira	Elsevier	Signal Processing: Image Communication	Area Editor
Fernando Pereira	Springer	International Journal of Image and Video Processing	Associate Editor
Junhui Hou	IEEE CAS	IEEE TCSVT	Associate Editor
Junhui Hou	IEEE SPS	IEEE TIP	Associate Editor
Wen-Hsiao Peng	IEEE CAS	IEEE Journal on Emerging and Selected Topics in Circuits and Systems (JETCAS)	Senior Editorial Board Member
Christian Herglotz	IEEE CAS	T-CSVT	Associate Editor, Reviewer
Chae Eun Rhee	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Heming Sun	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Li Zhang	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Zhibo Chen	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Ichiro IDE	IEEE CAS	IEEE Transactions on Multimedia	Associate Editor

Wonjun Kim	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Reviewer
Wengang Zhou	IEEE CAS	IEEE Transactions on Multimedia	Lead Guest Editor
Wengang Zhou	IEEE CAS	IEEE Transactions on Multimedia	Associate Editor
Jun Liu	IEEE Biometrics Council (BIOMC) IEEE Computational Intelligence Society IEEE Engineering and Medicine in Biology Society IEEE Circuits and Systems Society IEEE Computer Society	IEEE Transactions on Biometrics, Behavior, and Identity Science	AE
Ying Liu	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Zhu Li	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor-in-Chief
Vladan Velisavljevic	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Vladan Velisavljevic	IEEE CAS / SPS	IEEE Transactions on Multimedia	Associate Editor
Richang Hong	IEEE CAS	IEEE transactions on Circuit System and Video Technology	Editor
Richang Hong	IEEE CAS/SP/CS	IEEE transactions on Multimedia	Editor
Xu Dong	IEEE CAS	ACM Computing Surveys 2022-present	Senior Associate Editor
Xu Dong	IEEE CAS	Journal of Signal Processing Systems MLSP 2021 special issue, 2022/02-2022/12	Guest Editor
Xu Dong	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology (T-CSVT) special issue on Learned Visual Data Compression for both Human and Machine, 2021/12-2022/12	Guest Editor
ALESSANDRO GNUTTI	IEEE SPS	IEEE TIP	Associate Editor
Wen-Hsiao Peng	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Bihan Wen	Guest Editor	IEEE Signal Processing Magazine	Guest Editor
Bihan Wen	Guest Editor	IEEE Journal of Selected Topics on Signal Processing	Guest Editor
Luciano Agostini	IEEE CAS	IEEE Transactions on Circuits and Systems for Video Technology – IEEE TCSVT	Associated Editor
Luciano Agostini	IEEE CAS	IEEE Open Journal of Circuits and Systems – IEEE OJCAS	Associated 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
Zhengguo Li	IEEE Fellow Elevation	Class 2023
Fernando Pereira	JPEG Requirements Chair	Since Feb 2016
Fernando Pereira	Outstanding Reviewer Award at IEEE International Conference on Acoustics, Speech, & Signal Processing (ICASSP'2022), Singapore	May 2022
Wen-Hsiao Peng	Distinguished Lecturer	2022-2023
Heming Sun	VCIP Best Demo Award	2022/12
Heming Sun	PCS Best Paper Award Finalists	2022/12
Li Zhang	Best Paper Award of the 2022 IEEE ISCAS VSPC Track	2022/05
Ichiro IDE	IEEE Transactions on Multimedia, Outstanding Associate Editor Award	Jan. 2022 – Dec. 2022
Wonjun Kim	TCSVT popular articles (title : Monocular Depth Estimation Using Laplacian Pyramid-Based Depth Residuals)	Current
Yen-Kuang Chen	IEEE CAS Distinguished Lecturer	2023-2024
Xin Jin	ISO/IEC JTC 1/SC 29/WG 04 MPEG Video Coding: AHG on Lenslet Video Coding co-chair	Since Dec. 2021

Luciano Agostini	Honorable Mention Award - 35th Symposium on Integrated Circuits and Systems Design (SBCCI 2022).	2022
------------------	--	------

3.4. Keynote Speeches/Invited Talks:

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Fernando Pereira	TPC 1 st Workshop on Interactive eXtended Reality	Keynote speech at IXR 2022: 1 st Workshop on Interactive eXtended Reality, ACM International Conference on Multimedia, Lisbon, Portugal	"Deep learning-based extended reality: making humans and machines speak the same visual language"	October 2022.
Fernando Pereira	TPC	Tutorial at ACM International Conference on Multimedia (ACM Multimedia'2022), Lisbon, Portugal	"Deep learning-based point cloud coding for immersive experiences"	October 2022
Zhibo Chen	ISCAS	Tutorial talk	Advances in Generative Image Compression	May 2022
Junhui Hou	Organization Committee	16 th IEEE International Conference on Signal Processing (IEEE ICSP)	Learning to Enhance 3D Point Clouds: from Static to Dynamic	21 -24 Oct. 2022
Junhui Hou	Organization Committee	2 nd JPEG Pleno Workshop on Learning-Based Light Field Coding	Light Field Compression by View Synthesis	10 Nov. 2022
Lei Zhang	Microsoft Research (MSR)	The 2 nd Computer Vision and Vision-Language Summer Seminar	Improving Transformer-based Detector with Better Structured Queries	August 18, 2022
Lei Zhang	Conf Organizers	Symposium on AI for Astronomy	20 Years of Object Detection: In Pursuit of Better Performance with Less Sliding Windows	Nov. 24, 2022
Wen-Hsiao Peng	APSIPA	APSIPA Forum on Intelligent Low-Complexity, Low-Power Visual Signal Processing Systems	Towards Practical Learning-based Image and Video Coding	Dec. 1, 2022
Wen-Hsiao Peng	IEEE CAS Singapore Chapter	IEEE CAS Distinguished Lecturer Seminar	Advances in Design and Implementation of End-to-End Learned Image and Video Compression	Sep. 23, 2022
Wen-Hsiao Peng	IEEE CAS US Chapter	IEEE CAS Distinguished Lecturer Seminar	End-to-End Learned Image and Video Compression: Design, Implementation, and Computer Vision Applications	May 26, 2023
Wen-Hsiao Peng	IEEE Computer Society	IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)	Advances in Design and Implementation of End-to-End Learned Image and Video Compression	Jan. 3, 2023
Christian Herglotz	Guilherme Correa	6 th Seasonal School on Digital Processing of Visual Signals and Applications (DPVSA) 2022	Sustainable Video Streaming Systems	Nov. 17 th 2022
Wen-Hsiao Peng, Heming Sun, Christian Herglotz	Wen-Hsiao Peng	Online APSIPA forum	Intelligent Low Complexity, Low Power Visual and Signal Processing Systems	Dec. 1 st 2022
Ichiro IDE	Organizing Committee	MMM2022	Challenges on bridging the gap between Vision and Language (V&L) information	June 6, 2022
Ichiro IDE	Organizing Committee	1 st Int. Workshop on Multimodal Understanding for the Web and Social Media (MUWS2022) in conjunction with ACM TheWebConf2022	Tailoring applications to users through multi-modal understanding	April 26, 2022
Jun Liu	Mengyuan Liu (Peking University)	Invited Talk	Dynamic Neural Networks – Efficiency, Accuracy, and Robustness	2023 April 4
Jun Liu	Jinghua Wang (HIT)	Invited Talk	Dynamic Neural Networks – Efficiency, Accuracy, and Robustness	2023 April 2

Heming Sun	IEEE Computer Society	Invited Talk	Advances in Design and Implementation of End-to-End Learned Image and Video Compression	Jan. 3, 2023
Xin Jin	Organizing Committee	Keynote speech as International Computational Imaging Conference 2022	Research on solving the underdetermined problem for scattering imaging	Oct. 11 th , 2022
Xin Jin	Shufang Zhang (Tianjin University)	Invited Talk	Research on solving the underdetermined problem for scattering reconstruction in computational imaging	Oct. 19 th , 2022
Bihan Wen	ICME	Tutorial Instructor	Machine Learning for Image and Multimedia Reconstruction: From Sparse Modeling to Deep Neural Networks	2023

3.5. Other distinguished IEEE services

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

Your Name	Organization	Position/Activities	Period
Wen-Hsiao Peng	IEEE CAS	Voting Member of IEEE CASS SASD Standards Committees	2022-2023
Wen-Hsiao Peng	IEEE CAS	CAS Representative to the IEEE Signal Processing Society	2022-2023
Zhu Li	T-CSVT	Best Paper Nomination	2023
Pei-Yun Tsai	IEEE Asian Solid-State Circuits Conference	TPC Co-Chair	2023
Pei-Yun Tsai	IEEE CASS	Taipei Chapter Vice-Chair	2021-2022

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)

2022 IEEE Visual Communications and Image Processing (VCIP) Conference

- Date: Dec.13 – 16, 2022
- Location: Suzhou, China
- General Chairs: Zicheng Liu (VSPCTC Member)
- Technical Program Chairs: Jiwen Lu, Jingjing Meng, Mathias Wien, Zhu Li (all VSPCTC Member)
- Run in virtual mode due to epidemic
- 174 submissions
- 103 papers accepted (59%)
- Total number of registrations: 114

Note: VCIP has been organized annually under the auspice of the IEEE CASS VSPCTC since 2011.

- (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)

CASS competitions: Dr. Li Zhang (VSPCTC Member) organized the 2nd Grand Challenge on Neural Network-based Video Coding at ISCAS 2023

- Co-organizers: Jizheng Xu, Kai Zhang and Yue Li (ByteDance).
- Main sponsor: Bytedance.
- Technical sponsor: IEEE CASS VSPCTC.
- 7 teams participated in this Grand Challenge.
- 3 papers were accepted for publication at ISCAS 2022.

Note: This is the challenge drives the development of learned video codecs toward being more practical by requiring that the learned codecs must achieve variable-rate compression with a single

network model. While learned video compression is still in the exploration phase, it has the potential of making way into ISO/IEC or IEEE standards.

Special Sessions at ISCAS: Prof. Zhu Li (VSPCTC Member) and Prof. Li Li organized a special session on “Practical learned image/video compression” at ISCAS 2023.

- This special session targets the recent Practical learned image/video compression technological, and 5 papers were accepted for publication.
- **Note:** This is an effort to bring more experts to ISCAS by organizing special sessions intended to address topics that are of interest to the VSPCTC community, and more broadly, the CAS community.

(3) Organized new CASS initiatives

- Invited TC members to organize 2nd Grand Challenges at ISCAS, 2023.
- Maintain IEEE CASS VSPCTC LinkedIn page (<https://bit.ly/3vapRsi>) to advertise works/activities by our TC members, in an effort to promote VSPCTC in various communities; as of now, it has attracted 203 followers.
- Continue to promote ISCAS Call-for-Papers to VCIP participants to attract submissions to Track 11;
- Continue to Institute Track-level (Track 11) Best Paper Award at ISCAS 2023 to attract submissions; 3 top papers were selected out of 29 accepted papers, with 1 recommended for the award of best paper and another for best paper runner up, by Best Paper Award Committee composed of senior VSPCTC members

(4) Established cross-TCs/SIGs collaborations

(5) Awards received by the TC/SIG or the TC/SIG members

- Xin Jin, Gold Medal of 2022 International Exhibition of Inventions of Geneva, “Time-of-flight-based volumetric scattering imaging system,” Mar. 2022
- Xin Jin, Silver Medal of 2022 International Exhibition of Inventions of Geneva, “Structural-light-field-based defect inspection system for highly reflective surfaces,” Mar. 2022

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?

- Prof. Byeungwoo Jeon, Nam Ling and Fernando Pereira ((all VSPCTC Member)) are planning to organize VCIP conference in 2023, as general chairs of VCIP-2023.