2017 Annual Report (June 2016 – May 2017)
Visual Signal Processing and Communication Technical Committee
IEEE Circuits and Systems Society

Chairman: Jianfei Cai
Secretary: Qi Tian

1. Technical Committee Meeting:

The Visual Signal Processing and Communication Technical Committee in the IEEE Circuits and Systems Society organizes one annual TC meeting, held in ISCAS and one in VCIP. The detailed Information is given as follows.

1.1. Upcoming TC Meeting in ISCAS 2017

Date: May 29th, 2017 (Monday, during ISCAS 2017)
Venue: Room Iron
ISCAS 2017, Baltimore, MD, USA
Time: 13:00-14:00

1.2. Proposed Agenda

(To be finalized)

- Approval of the agenda
- BOG & TC Chair meeting reports & Review TC activities
- Conference Subcommittee
    - Update on IEEE CAS financial support
    - VCIP 2017 Status Report
    - VCIP 2018 Status Report
- Publicity Subcommittee
- Award Subcommittee
- Membership Subcommittee
    - Nomination of new TC members
- Other business
- Adjourn

2. Members submitted Annual Reports:

First Name	Last Name	Affiliation	Email
Jianfei	Cai	Nanyang Technological University	asjfcai@ntu.edu.sg

3. Your Report on Accomplished Technical Activities (June 2016 to May 2017)

3.1. Conference/Event organizations

Your Name	Conference Sponsors	Conference/Event Title	Your Role
Ming-Ting Sun	IEEE	ICME 2016	General Co-Chair
Yo-Sung Ho	IEEE	RIVF 2016	Program Chair
Yo-Sung Ho	APSIPA	ASC 2016	General Chair
Ling Guan	IEEE	Forum on Future Media Technology 2016	Honorary Chair
Ling Guan		Pacific-Rim Conf. on Multimedia	Steering Committee Chair
Ling Guan	IEEE Canada	Canadian Conference in Electrical and Computer Engineering	Member of Conference Editorial Board
Wen-Hsiao	IEEE	International Symposium on Multimedia (ISM), 2016	Technical Program

			Committee Member
Wen-Hsiao Peng	INSTICC	International Conference on Signal Processing and Multimedia Applications	Technical Program Committee Member
Wen-Hsiao Peng	IEEE	International Conference on Image Processing (ICIP), 2019	Publication Chair
Hsu-Feng Hsiao	IEEE	ICUFN 2016	TPC
Hsu-Feng Hsiao	IEEE	ICME 2016	Reviewer
Hsu-Feng Hsiao	IEEE	MMSP 2016	Reviewer
Hsu-Feng Hsiao	IEEE	VCIP 2016	Reviewer
Junsong Yuan	IEEE	ICME 2016	Publication co-chair
Lu Yu	IEEE	VCIP 2016	Workshop Chair
Lu Yu	Technical Co-sponsor: IEEE SPS	PCS 2016	TPC Area Chair, International Steering Committee Member
Fei Qiao	IEEE	DSP 2016	TPC
Fei Qiao	IEEE	SiPS 2016	TPC
Tihao Chiang	IEEE	IEEE ICCE-TW 2016	International Coordinator, TPC member
Tihao Chiang	IEEE	ICCE 2016	Review Committee Member
Lin Weisi	IEEE	ICIP2016	Area Chair
Lin Weisi	IEEE	ICASSP-16	Area Chair
Lin Weisi	IEEE	ICME 2016	Area Chair
Lin Weisi	IEEE	VCIP 2016	Tutorial Chair
Lin Weisi	IEEE	VCIP 2017	Technical Program Co-Chair
Ebroul Izquierdo	IEEE	ICIP 16	Area Chair
Ebroul Izquierdo	IEEE	ICIP 16	Special session organizer
Ebroul Izquierdo	IEEE	ICME 16	Area Chair
Ebroul Izquierdo	IEEE	PCS 2016	Reviewer
Lifeng Sun	IEEE	ICME 2016	TPC
Lifeng Sun	IEEE	ICIP 2016	TPC
Lifeng Sun	ACM	Multimedia 2016	TPC
Lifeng Sun	IEEE	Big Data Service 2016	TPC
Wenwu Zhu	ACM	ACM Multimedia 2016	Track Chair
Zicheng Liu	IEEE	ICME 2016	Local Chair
Zicheng Liu	IEEE	ISCAS2016	Track Chair
Zicheng Liu	ACM	Multimedia2016	Area Chair
Daniel Lun	IEEE	2016 IEEE International Conference on Multimedia and Expo	Area Chair
Daniel Lun	IEEE	2017 IEEE International Conference on Multimedia and Expo	Finance Chair
Nam Ling	IEEE	Umedia 2016	General Co-Chair
Nam Ling	IEEE	ICIEA 2016	Int'l Advisory Committee
Nam Ling	IEEE	ICASSP 2017	Exhibit Chair
Jianfei Cai	IEEE	ICIP'16'17	Area Chair
Jianfei Cai	IEEE	VCIP'16	TPC Co-Chair
Jianfei Cai	IEEE	ISCAS 2017	Track Co-Chair
Jianfei Cai	IEEE	MMSP'16'17	Area Chair

3.2. IEEE and Other Journal Editorships:

Your Name	Journal Sponsors	Journal Title	Your Role

Chang Wen Chen	IEEE	IEEE Journal of Selected Areas in Communications	Senior Editor
Yo-Sung Ho	SPRINGER	Journal of Signal Processing Systems	Associate Editor
Ling Guan	Eurasip	Image and Video Processing	AE
Ling Guan	Springer	Signal Processing Systems	AE
Eduardo da Silva	Springer	Multidimensional Systems and Signal Processing	Member of the Editorial Board
Eduardo da Silva	IEEE	IEEE Transactions on Circuits and Systems I: Regular Papers	Deputy Editor in Chief
Kai-Kuang Ma	IEEE	IEEE Transactions on Image Processing	Senior Associate Editor
Kai-Kuang Ma	IEEE	IEEE Transactions on Circuits & Systems for Video Technology	Associate Editor
Kai-Kuang Ma	IEEE	IEEE Signal Processing Letters	Associate Editor
Wen-Hsiao Peng	IEEE	IEEE Journal on Emerging and Selected Topics in Circuits and Systems	Lead Guest Editor
Junsong Yuan	IEEE	IEEE Trans. on CSVT	AE
Junsong Yuan	IEEE	IEEE Trans. on Image Processing	AE
Weiyao Lin	Elsevier	Journal of Visual Communication and Image Representation	Associate Editor
Weiyao Lin	Elsevier	Signal Processing: Image Communication	Area Editor
Weiyao Lin	Springer	Circuits, Systems, and Signal Processing	Associate Editor
Weiyao Lin	IEEE	IEEE Access	Associate Editor
Enrico Magli	IEEE	IEEE Transactions on Multimedia	Associate Editor
Enrico Magli	IEEE	IEEE Transactions on Circuits and Systems for Video Technology	Associate Editor
Enrico Magli	IEEE	IEEE Journal of Selected Topics in Signal Processing	Guest Editor
Carl James Debono	IEEE COMSOC	R-Letters	Review board member
Weisi Lin	IEEE	Transactions on Circuits & Systems for Video Technology	AE
Weisi Lin	IEEE	Trans. on Image Processing	AE
Weisi Lin	IEEE	Signal Processing Letters	AE
Weisi Lin	Elsevier	Journal of Visual Communication and Image Representation	AE
Lap-Pui Chau	IEEE	IEEE Transactions on Circuits and Systems for Video Technology	Associate editor
Lap-Pui Chau	IEEE	IEEE Transactions on Broadcasting	Associate editor
Lap-Pui Chau	IEEE	IEEE Transactions on Circuits and Systems II	Associate editor
Lap-Pui Chau	Springer Journal	The Visual Computer	Associate editor
Ebroul Izquierdo	Eurasip	Image and video processing	Associate editor
Wenwu Zhu	IEEE	IEEE Trans. on Multimedia	Editor-in-chief
Wenwu Zhu	IEEE	IEEE Trans. On Big Data	Associate Editor
Wenwu Zhu		J. Comput. Sci. Technol.	Leading Editor
Wenwu Zhu	IEEE	Special Section on Visual Computing in the Cloud: Fundamentals and Applications. IEEE Trans. Circuits Syst. Video Techn.	Guest Editor
Zicheng Liu	IEEE	TMM	Steering Committee member
Zicheng Liu	Elsevier	J. Visual Communication and Image Representation	EiC
Zicheng Liu	Springer	Machine Vision and Applications	AE
Daniel Lun	IEEE	Signal Processing Letters	Associate Editor
Nam Ling	Springer	Multidimensional Systems and Signal Processing	Associate Editor
Nam Ling	Springer	Human-centric Computing and Information Sciences	Associate Editor
Jianfei Cai	IEEE	IEEE Trans. on Image Processing	AE

3.3. Awards, Honors, and Recognition

(Fellow, Distinguished Lecturer, Outstanding Service, Best Paper Awards, etc.)

Your Name	Awards / Honors / Recognition	Period
Enrico Magli	IEEE Fellow	Class of 2017
Enrico Magli	IEEE Distinguished Lecturer (CAS)	2015-2016
Lap-Pui Chau	IEEE Fellow	Class of 2017
Yo-Sung Ho	IEEE Fellow	Class of 2017
Shuicheng Yan	IEEE Fellow	Class of 2017
Weisi Lin	IEEE CAS Distinguished Lecturer	2016—2017
Ebroul Izquierdo	IEEE Distinguished lecturer	2016-2017
Wenwu Zhu	ACM Distinguished Lecturer	2013-present
Zicheng Liu	IEEE CAS Distinguished Lecturer	2015-2016
Nam Ling	Santa Clara University (USA) Sanfilippo Family Chair Professor (re-appointed)	2015-2020
Nam Ling	Lanzhou University (China) Cuiying Chair Professor (re-appointed)	2015-2018

3.4. Keynote Speeches/Invited Talks:

Your Name	Invited by	Event/Conference Title	Talk Title	Date
Ebroul	Eurasip	Elmar 2016	Cloud-Based Media Processing for	

Izquierdo			Improved Broadcasting Applications	
Ebroul Izquierdo	IEEE CAS Shanghai chapter	Distinguished lecture	Visual Information Retrieval: From Machine Vision to Human Computation	
Ebroul Izquierdo	IEEE CAS Colombia chapter	Distinguished lecture	Face Recognition in the Wild	

3.5. Other distinguished IEEE services
(e.g., CAS BoG, Region presidents, VP, TC Chairs/Secretary,…)

Your Name	Organization	Position/Activities	Period
Chang Wen Chen	IEEE CASS	Vice President for Finance and Administrative Activities	2016-2017
Yo-Sung Ho	IEEE R10	Delegate of Kwangju Chapter	2016.03.05~06
Eduardo da Silva	IEEE	IEEE Circuits and Systems Society, VP Regional Activities and Membership	2014-2017
Eduardo da Silva	SBrT - Brazilian Telecommunications Society	Vice President Technical Activities	2014-2017
Wen-Hsiao Peng	VSPCTC	Conference Sub-committee Co-Chair	2015-2016
Enrico Magli	MMSP-TC (SPS)	TC chair	2016-present
Carl James Debono	IEEE	Chair / Conference Quality Committee	2015 - 2016
Carl James Debono	IEEE	MGA representative on the IEEE Conferences Committee	2013 - 2016
Lu Yu	VSPC TC	Membership Sub-committee Co-Chair	2015~
Lifeng Sun	IEEE MMTC	Co-Director of Membership Board	2014- current
Lifeng Sun	IEEE MMTC	Member of Review Board	2013- current
Wenwu Zhu	IEEE	Beijing Chapter Chair	
Zicheng Liu	MSA TC	Chair	2015-2017
Jianfei Cai	IEEE VSPC-TC	Chair	2016-2018

5. TC Significant Activities List
[Please list your 2 (or less) most significant activities in the past year (March 2016--May 2017), including paper, special session, special issue, workshop, conference, award, important position, etc]

- **Jianfei Cai**

[Paper] D. Xu, Q. Duan, J. Zheng, J. Zhang, J. Cai and T. J. Cham, "Shading-based surface detail recovery under general unknown illumination", IEEE T-PAMI, Feb. 2017.
50-word summary: Reconstructing the shape of a 3D object from multi-view images under unknown, general illumination is a fundamental problem in computer vision and high quality reconstruction is usually challenging especially when fine detail is needed and the albedo of the object is non-uniform. This paper introduces vertex overall illumination vectors to model the illumination effect and presents a total variation (TV) based approach for recovering surface details using shading and multi-view stereo (MVS).

[Paper] H. Yang, J. T. Zhou, J. Cai and Y. S. Ong, "MIML-FCN+: multi-instance multi-label learning via fully convolutional networks with privileged information", IEEE CVPR 2017.

50-word summary: Multi-instance multi-label (MIML) learning has many interesting applications in computer visions, including multi-object recognition and automatic image tagging, where additional information such as bounding-boxes, image captions and descriptions is often available during training phrase, which is referred as privileged information (PI). However, as existing works on learning using PI only consider instance-level PI, they fail to make use of bag-level PI available in MIML learning. Moreover, the existing works are not SGD-compatible and thus they fail to benefit from rapid developments of deep learning. Therefore, in this paper, we propose a two-stream fully convolutional network, named MIML-FCN+, unified by a novel PI loss to solve the problem of MIML learning with privileged bags.