



Runmin Cong

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OVERVIEW

I am a final year Ph.D candidate at School of Electrical and Information Engineering, Tianjin University, China, supervised by Prof. [Qingming Huang](#) (IEEE Fellow) and Prof. [Jianjun Lei](#). From Dec. 2016 to Feb. 2017, I worked with Prof. [Weisi Lin](#) (IEEE/IET Fellow) as a visiting student at School of Computer Science and Engineering, Nanyang Technological University (NTU), Singapore. Since May 2018, I have been working with Prof. [Sam Kwong](#) (IEEE Fellow) and Dr. [Junhui Hou](#) as a Research Associate at the Department of Computer Science, City University of Hong Kong (CityU), Kowloon, Hong Kong. My current research interests include computer vision, saliency detection, video analysis, remote sensing image processing, and deep learning. I won the *IEEE ICME 2018 Best Student Paper Runner-Up Award*, the *First Prize for Scientific and Technological Progress Award of Tianjin Municipality*, the *National Scholarship*, the *Innovation Scholarship of Tianjin Municipality*, and the *Outstanding Doctoral Dissertation Foundation of Tianjin University*.

EDUCATION

Ph.D Candidate

2015/09–2019/06

School of Electrical and Information Engineering

Tianjin University (TJU), China

Supervisor: Prof. [Qingming Huang](#) ([IEEE Fellow](#)) and Prof. [Jianjun Lei](#)

Postgraduate

2011/09–2014/06

School of Electronic Information and Automation

Civil Aviation University of China (CAUC), China

Supervisor: Prof. [Ping Han](#)

Undergraduate

2007/09–2011/06

School of Electronic Information Engineering

South-central University for Nationalities, China

Adviser: Prof. [Xiangyuan Li](#)

RESEARCH EXPERIENCE

Research Associate

2018/05–2019/05

Department of Computer Science
City University of Hong Kong (CityU), Hong Kong
Supervisor: **Prof. Sam Kwong** ([IEEE Fellow](#)) and **Prof. Junhui Hou**

Visiting Ph.D Student

2016/12–2017/02

School of Computer Science and Engineering
Nanyang Technological University (NTU), Singapore
Supervisor: **Prof. Weisi Lin** ([IEEE/IET Fellow](#))

PUBLICATIONS

14. Runmin Cong, Jianjun Lei, Huazhu Fu, Qingming Huang, Xiaochun Cao, Chunping Hou, “[Co-saliency detection for RGBD images based on multi-constraint feature matching and cross label propagation](#)”, *IEEE Transactions on Image Processing*, **27(2)**, pp. 568-579 (2018). (SCI, IF=5.071)
13. Runmin Cong, Jianjun Lei, Huazhu Fu, Weisi Lin, Qingming Huang, Xiaochun Cao, Chunping Hou, “[An iterative co-saliency framework for RGBD images](#)”, *IEEE Transactions on Cybernetics*, DOI: **10.1109/TCYB.2017.2771488**, pp. 1-14 (2018). (SCI, IF=8.803)
12. Runmin Cong, Jianjun Lei, Huazhu Fu, Ming-Ming Cheng, Weisi Lin, Qingming Huang, “[Review of visual saliency detection with comprehensive information](#)”, *IEEE Transactions on Circuits and Systems for Video Technology*, DOI: **10.1109/TCSVT.2018.2870832**, pp. 1-19 (2018). (SCI, IF=3.558)
11. Runmin Cong, Jianjun Lei, Huazhu Fu, Qingming Huang, Xiaochun Cao, Nam Ling, “[HSCS: Hierarchical sparsity based co-saliency detection for RGBD images](#)”, *IEEE Transactions on Multimedia*, DOI: **10.1109/TMM.2018.2884481**, (2018). (SCI, IF=3.977)
10. Runmin Cong, Jianjun Lei, Changqing Zhang, Qingming Huang, Xiaochun Cao, Chunping Hou, “[Saliency detection for stereoscopic images based on depth confidence analysis and multiple cues fusion](#)”, *IEEE Signal Processing Letters*, **23(6)**, pp. 819-823 (2016). (SCI, IF=2.813)
9. Runmin Cong, Ping Han, Chongyi Li, Jiaji He, Zaiji Zhang, “[Manmade target extraction based on multi-stage decision and its application for change detection in polarimetric synthetic aperture radar image](#)”, *Journal of Electronic Imaging*, **25(5)**, pp. 1-13 (2016). (SCI, IF=0.780)
8. Min Ni, Jianjun Lei, Runmin Cong*, Kaifu Zheng, Bo Peng, Xiaoting Fan, “[Color-guided depth map super resolution using convolutional neural network](#)”, *IEEE Access*, **2**, pp. 26666–26672 (2017). (SCI, IF=3.557, *corresponding author)
7. Yonghua Zhang, Liang Li, Runmin Cong, Xiaojie Guo, Hui Xu, Jiawan Zhang, “[Co-saliency detection via hierarchical consistency measure](#)”, *IEEE ICME*, **Oral**, pp. 1-6 (2018). (**Best Student Paper Runner-Up**)
6. Mengxin Han, Runmin Cong, Xinyu Li, Huazhu Fu, Jianjun Lei, “[Joint spatial-spectral hyperspectral image classification based on convolutional neural network](#)”, *Pattern Recognition Letters*, DOI: **10.1016/j.patrec.2018.10.003**, (2018). (SCI, IF=1.952)

5. Chongyi Li, Jichang Guo, Runmin Cong, Yanwei Pang, Bo Wang, “[Underwater image enhancement by dehazing with minimum information loss and histogram distribution prior](#)”, *IEEE Transactions on Image Processing*, **25(12)**, pp. 5664-5677 (2016). (SCI, IF=5.071)
4. Chongyi Li, Jichang Guo, Chunle Guo, Runmin Cong, Jiachang Gong, “[A hybrid method for underwater image correction](#)”, *Pattern Recognition Letters*, **94**, pp. 62-67 (2017). (SCI, IF=1.952)
3. Chongyi Li, Jichang Guo, Bo Wang, Runmin Cong, Yan Zhang, Jian Wang, “[Single underwater image enhancement based on color cast removal and visibility restoration](#)”, *Journal of Electronic Imaging*, **25(3)**, pp. 1-16 (2016). (SCI, IF=0.780)
2. Runmin Cong, Jianjun Lei, Huazhu Fu, Wenguan Wang, Qingming Huang, Lijie Niu, “[Research progress of video saliency detection](#)”, *Journal of Software*, **29(8)**, pp. 2527–2544 (2018). (EI)
1. Ping Han, Runmin Cong, Zaiji Zhang, “[Change detection algorithm of polarimetric SAR image based on polarization state extracting](#)”, *Systems Engineering and Electronics*, **37(7)**, pp. 1526-1530 (2015). (EI)

PAPERS UNDER REVIEW

5. Runmin Cong, Jianjun Lei, Huazhu Fu, Fatih Porikli, Qingming Huang, Chunping Hou, “[Video saliency detection via sparsity-based reconstruction and propagation](#)”, *IEEE Transactions on Image Processing*, **Major Revision**, (2018). (SCI, IF=5.071)
4. Runmin Cong, Jianjun Lei, Huazhu Fu, Junhui Hou, Qingming Huang, Sam Kwong, “[Going from RGB to RGBD saliency: A depth-guided transformation model](#)”, *IEEE Transactions on Cybernetics*, **Under Review**, (2018). (SCI, IF=8.803)
3. Chunle Guo, Chongyi Li, Jichang Guo, Runmin Cong, Huazhu Fu, Ping Han, “[Hierarchical features driven residual learning for depth map super-resolution](#)”, *IEEE Transactions on Image Processing*, **Major Revision**, (2018). (SCI, IF=5.071)
2. Hua Li, Sam Kwong, Chuanbo Chen, Yuheng Jia, Runmin Cong, “[Superpixel segmentation based on square-wise asymmetric partition and structural approximation](#)”, *IEEE Transactions on Multimedia*, **Under Review**, (2018). (SCI, IF=3.977)
1. Chongyi Li, Chunle Guo, Jichang Guo, Ping Han, Huazhu Fu, Runmin Cong, “[PI-Net-R: Perception-inspired single image dehazing network with refinement](#)”, *IEEE Transactions on Multimedia*, **Under Review**, (2018). (SCI, IF=3.977)

CHINA PATENTS

7. Runmin Cong, Jianjun Lei, Chunping Hou, Chongyi Li, Xiaoxu He, and Jinhui Duan, “[A saliency detection method for stereoscopic images](#)”, *Patent No.: ZL 201610244589.9*, Granted Date: 2018.08 (**Granted Patent**).
6. Jianjun Lei, Runmin Cong, Chunping Hou, Jinhui Duan, and Dongyang Li, “[A confidence measure for depth map](#)”, *Patent No.: ZL 201610242241.6*, Granted Date: 2018.08 (**Granted Patent**).

5. Jianjun Lei, Runmin Cong, Chunping Hou, Chongyi Li, Liying Xu, and Zhe Zhang, “[A co-saliency detection method for RGBD images](#)”, *Application No.: 201810879724.6* , Application Date: 2018.10 (Application Patent).
4. Jianjun Lei, Runmin Cong, Chunping Hou, Sanyi Zhang, Yue Chen, and Yan Guo, “[An iterative co-saliency detection method](#)”, *Application No.: 201711064083.0* , Application Date: 2017.11 (Application Patent).
3. Jianjun Lei, Runmin Cong, Chunping Hou, Xinxin Li, Mengxin Han, and Xiaowei Luo, “[A depth shape prior extraction method](#)”, *Application No.: 201711065005.2* , Application Date: 2017.11 (Application Patent).
2. Jianjun Lei, Runmin Cong, Chunping Hou, Bo Peng, Xiaoting Fan, and Jing Zhang, “[An inter-image saliency detection method](#)”, *Application No.: 201710942099.0* , Application Date: 2017.10 (Application Patent).
1. Jianjun Lei, Runmin Cong, Chunping Hou, Jing Zhang, Xiaoting Fan, and Bo Peng, “[A co-saliency detection method](#)”, *Application No.: 201710942783.9* , Application Date: 2017.10 (Application Patent).

HONORS & AWARDS

- 2018 The First Prize for Scientific and Technological Progress Award of Tianjin Municipality
- 2018 National Scholarship, Ministry of Education of the People’s Republic of China
- 2018 IEEE ICME Best Student Paper Runner-Up
- 2018 Innovation Scholarship of Tianjin Municipality
- 2018 Outstanding Doctoral Dissertation Foundation of Tianjin University
- 2017 “National Model” Scholarship, Tianjin University
- 2017 Excellent Student Cadre, Tianjin University
- 2017 Outstanding Student for International Exchange, Tianjin University
- 2017/2016 The First-class Academic Scholarship, Tianjin University
- 2017/2016 Outstanding Student for Technological Innovation, Tianjin University
- 2016 Merit Student, Tianjin University
- 2016 Top Ten Excellent Youth in the School of EIE, Tianjin University
- 2018/2015 The Second-class Academic Scholarship, Tianjin University
- 2014 Excellent Postgraduate, Civil Aviation University of China
- 2014 Excellent Master Dissertation, Civil Aviation University of China
- 2013 The Special Scholarship of JIUZHOU, Civil Aviation University of China
- 2010/2009/2008 The Professional Scholarship, South-central University for Nationalities

PARTICIPATING PROJECTS

- (Principal Investigator) “Research on visual saliency detection with comprehensive information”, Outstanding Doctoral Dissertation Foundation of Tianjin University, 2018/11 – now
- (Principal Participator) “3D video coding and processing”, The National Natural Science Foundation of China (NSFC), 2018/01 – now
- (Principal Participator) “Real-time real 3D display technology for big data applications”, The National Key R&D Program of China, 2016/08 – now
- (Principal Participator) “Research on multiview video coding theory and technologies based on stereoscopic vision saliency”, The National Natural Science Foundation of China (NSFC), 2015/04 – 2016/12
- (Principal Participator) “Scalable depth video coding based on vision saliency”, Seed Foundation of Tianjin University, 2015/04 - 2015/12
- (Principal Participator) “Research on crashed aircraft target detection and recognition based on synthetic aperture radar”, The National Natural Science Foundation of China (NSFC), 2011/09 - 2014/06

ACADEMIC ACTIVITIES

- **Invited Talks:** Excellent PhD Workshop of ADMA2018 at Nanjing University of Aeronautics and Astronautics
- **Reviewer for journals:** IEEE Transactions on Image Processing (TIP), IEEE Transactions on Multimedia (TMM), IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), Neurocomputing, Neural Networks, IEEE Access, Image and Vision Computing Journal, BMC Medical Imaging, CAAI Transactions on Intelligence Technology, Advances in Multimedia
- **Reviewer for conferences:** Pacific Graphics 2018, IEEE ISMAR 2018, ACPR 2017, FSDM 2017, CECNet 2017, MICCAI 2016