

# Rui Zhao (zhaorui.xyz)

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## Contact Information

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## Summary

- 10-year R&D experience on image/video related computer vision applications, especially on face recognition and person re-identification.
- 3-year experience of leading and delivering industrial projects.
- Management experience of a 30-people team.
- Outstanding academic record with 10+ papers published in top conferences and journals, and over 2,400 Google Scholar citations.
- Fast learner & team player with passionate commitment at work.

## Education

**The Chinese University of Hong Kong (CUHK)**, Shatin, Hong Kong    2010-2015  
Doctor of Philosophy, Electronic Engineering

**University of Science and Technology of China (USTC)**, Hefei, China    2006-2010  
Bachelor, Information Science and Electronic Engineering

## Experience

SenseTime Group Limited (Shenzhen)	<b>Research Director</b>	2018-now
SenseNets Technology (Shenzhen)	<b>CTO</b>	2017-2018
SenseNets Technology (Shenzhen)	<b>R&amp;D VP</b>	2016-2017
SenseNets Technology (Shenzhen)	<b>R&amp;D Director</b>	2015-2016
SenseTime Group Limited (Hong Kong)	<b>Senior Researcher</b>	2015-2016
The Chinese University of Hong Kong	<b>Research Assistant</b>	2010-2011

## Grants, Honors and Awards

- Excellent Manager Award (SenseNets)    2016-2017
- Kongque Plan Certificate (Shenzhen Municipal Government)    2016
- Outstanding Reviewer Awards (ECCV 2016)    2016
- Doctoral Consortium Award (CVPR 2015)    2015
- Commendation for Outstanding Tutorial (CUHK)    2014
- Student Travel Grant (ICCV 2013)    2013
- Postgraduate Grants for Overseas Academic Activities (CUHK)    2013
- Postgraduate Studentship (CUHK)    2011-2014
- Second Prize in Mathematical Contest in Modeling (USTC)    2009
- Excellence Award in RoboGame Contest (USTC)    2008
- Excellent Undergraduate Scholarship (USTC)    2007-2009
- Excellent Freshman Scholarship (USTC)    2006

## PUBLICATIONS

- ArXiv Preprints** A1. H. Li, **R. Zhao**, and X. Wang, “Highly Efficient Forward and Backward Propagation of Convolutional Neural Networks for Pixelwise Classification,” *Preprint*, ArXiv:1412.4526
- Book Chapters** B1. X. Wang, and **R. Zhao**, “Person Re-Identification: System Design and Evaluation Overview,” *in book “Person Re-identification” edited by Shaogang Gong, Marco Cristani, Shuicheng Yan, and Chen Change Loy, published by Springer, 2014.*
- Peer-reviewed Journal Papers** J2. **R. Zhao**, W. Ouyang and X. Wang, “Person Re-identification by Saliency Learning,” *in IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, vol.39, pp.356-370, 2017.
- J1. **R. Zhao** and X. Wang, “Counting Vehicles from Semantic Regions,” *in IEEE Transactions on Intelligent Transportation Systems (TITS)*, vol.14, no.2, pp.1016-1022, March 2013.
- Peer-reviewed Conference Papers** C9. J. Xu, **R. Zhao**, F. Zhu, and W. Ouyang, “Attention-Aware Compositional Network for Person Re-identification,” *in IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)* 2018.
- C8. Z. Zhao, H. Li, **R. Zhao** and X. Wang, “Crossing-line Crowd Counting with Two-phase Deep Neural Networks,” *in European Conference on Computer Vision (ECCV)* 2016.
- C7. **R. Zhao**, W. Ouyang, H. Li and X. Wang, “Saliency Detection by Multi-Context Deep Learning,” *in IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)* 2015.
- C6. **R. Zhao**, W. Ouyang and X. Wang, “Learning Mid-level Filters for Person Re-Identification,” *in IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)* 2014.
- C5. W. Li, **R. Zhao**, T. Xiao and X. Wang, “DeepReid: Deep Filter Pairing Neural Network for Person Re-Identification,” *in IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)* 2014.
- C4. **R. Zhao**, W. Ouyang and X. Wang, “Person Re-Identification by Saliency Matching,” *in IEEE International Conference on Computer Vision (ICCV)* 2013.
- C3. **R. Zhao**, W. Ouyang and X. Wang, “Unsupervised Saliency Learning for Person Re-Identification,” *in IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)* 2013.
- C2. W. Li, **R. Zhao**, and X. Wang, “Human Reidentification with Transferred Metric Learning,” *in Asian Conference on Computer Vision (ACCV)* 2012.
- C1. L. Zhuang, **R. Zhao**, N. Yu and B. Liu, “SVD Based Linear Filtering in DCT Domain,” *in IEEE International Conference on Image Processing (ICIP)* 2010.
- Posters** P2. **R. Zhao**, W. Ouyang and X. Wang, “Unsupervised Saliency Learning for Person Re-Identification,” *in the 10th ACM-HK Student Research and Career Day (SRCDAY)*, November 19th, 2013.
- P1. **R. Zhao**, W. Ouyang and X. Wang, “Person Re-Identification by Saliency Matching,” *in the 10th ACM-HK Student Research and Career Day (SRCDAY)*, November 19th, 2013.
- Technical Skills**
- Computer Languages: Python, Matlab, C/C++, JavaScript, HTML, CSS, L<sup>A</sup>T<sub>E</sub>X
  - Productivity Tools: Matlab, Microsoft Visual Studio, Netbeans, Vim, Sublime, Git, SVN
  - Python Experience: Numpy, Scipy, Pandas, PyQt, Scikit-learn, Scikit-image, Theano, Pylearn2
  - Matlab Experience: Linear algebra, numeric computing, vectorization, parallel computing, CVX optimization, image segmentation, visual feature extraction, visualization
  - Operating Systems: Unix/Linux, OS X, Windows

## Professional Activities

- Member, IEEE
- Member, the Computer Vision Foundation (CVF)
- Student Volunteer, IEEE International Conference on Image Processing (ICIP), 2010
- Reviewer of
  - IEEE Transaction on Image Processing (TIP)
  - IEEE Transaction on Intelligent Transportation Systems (TITS)
  - IEEE Transaction on Circuits and Systems for Video Technology (TCSVT)
  - IEEE Transaction on Neural Network and Learning System (TNNLS)
  - IEEE Signal Processing Letters (SPL)
  - Elsevier Journal of Neurocomputing (NEUCOM)
  - Elsevier Journal of Image and Vision Computing (IMAVIS)
  - Elsevier Journal of Visual Communication and Image Representation Registration (JVCI)
  - Springer Journal of Machine Vision and Applications (MVA)
  - Springer Book “Person Re-identification”, 2014
  - IEEE International Conference on Computer Vision and Pattern Recognition (CVPR), 2015-2018
  - ACCV Workshop on Deep Learning on Visual Data (DLVD), 2014
- Program Committee Member of
  - The Association for the Advancement of Artificial Intelligence (AAAI), 2017,2018
  - IEEE International Conference on Multimedia Big Data (BigMM), 2015
  - Asian Conference on Computer Vision (ACCV), 2014,2016,2018
  - ACCV Workshop on Deep Learning on Visual Data (DLVD), 2014

## References

- Nenghai Yu                      Professor, University of Science and Technology of China  
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- Xiaogang Wang                Associate Professor, Chinese University of Hong Kong  
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- Xiaoou Tang                    Founder, SenseTime Group Limited  
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