

CONTACT INFORMATION	<p>Senior Researcher in Computer Vision Tencent Technology (Shenzhen) Company Limited Tencent building, Nanshan District, Shenzhen P.R.China Homepage: https://qiongcao.github.io</p> <p><i>Tel:</i> +0086 13612818291 <i>E-mail:</i> freyaqcao@tencent.com</p>
RESEARCH INTERESTS	Deep learning and computer vision with applications to face recognition and clustering in videos, 3D face reconstruction and sequence modelling.
EDUCATION	<p>Ph.D in Computer Science 12/2011 to 11/2015 University of Exeter, Exeter, UK Thesis: Some Topics on Similarity Metric Learning Supervisors: Prof. Yiming Ying and Prof. Richard Everson</p> <p>Master programme study in Mathematics 09/2010 to 11/2011 Zhejiang University, Zhejiang, China (I did not complete my master degree because I was given the opportunity to study PhD in Computer Science in University of Exeter.)</p> <p>B.Sc in Mathematics 09/2006 to 06/2010 Hebei Normal University, Hebei, China</p>
WORK AND ACADEMIC EXPERIENCE	<p>Senior Researcher in Computer Vision 09/2017 to present Youtu lab, Tencent Technology (Shenzhen) Company Limited.</p> <p>Postdoc Researcher in Computer Vision 03/2015 to 09/2017 Visual Geometry Group (VGG), Department of Engineering Science, University of Oxford. Supervisor: Prof. Andrew Zisserman</p>
AWARDS	<ul style="list-style-type: none"> • Nanshan Pilot Talent, Shenzhen, China, Oct 2018. • Overseas High-Caliber Personnel (Level C), Shenzhen, China, Feb 2018. • EPSRC Doctor Training Grant (DTG), UK, Dec 2011. • Outstanding undergraduate of Hebei province, China, Jul 2010.
PUBLICATIONS	<p>[1] W. N. Wang, W. J. Pei, Q. Cao, S. Liu, X. Y. Shen, Y. Zhao and Y. W. Tai. Orthogonal Center Learning with Subspace Masking for Person Re-Identification, <i>arXiv</i>, 2019.</p>

- [2] C. M. Fu, W. J. Pei, **Q. Cao**, C. P. Zhang, X. Y. Shen, Y. Zhao and Y. W. Tai. Non-local Recurrent Neural Memory for supervised Sequence Modeling, *Proceedings of the IEEE International Conference on Computer Vision (ICCV Oral, 4.3% acceptance rate)*, 2019.
- [3] H. W. Yi, C. Li, **Q. Cao**, X. Y. Shen, S. L. Li, G. P. Wang and Y. W. Tai. MMFace: a multi-metric regression network for unconstrained face reconstruction, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.
- [4] O. M. Parkhi, E. Rahtu, **Q. Cao** and A. Zisserman. Automated video face labelling for films and TV material, *IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)*, 2018.
- [5] **Q. Cao**, L. Shen, W. D. Xie, O. M. Parkhi and A. Zisserman. Vggface2: a dataset for recognising faces across pose and age, *IEEE Conference on Automatic Face and Gesture Recognition (FG)*, 2018.
- [6] N. Crosswhite, J. Byrne, O. M. Parkhi, C. Stauffer, **Q. Cao** and A. Zisserman. Template adaptation for face verification and identification, *IEEE Conference on Automatic Face and Gesture Recognition (FG)*, Oral presentation, 2017.
- [7] **Q. Cao**. Some Topics on Similarity Metric Learning, PhD thesis, 2015.
- [8] **Q. Cao**, Z. Guo and Y. Ying. Generalization bounds for metric and similarity learning, *Machine Learning Journal* 102 (1), 115-132, 2015.
- [9] **Q. Cao**, Y. Ying and P. Li. Similarity metric learning for face recognition, *Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, 2013.
- [10] **Q. Cao**, Y. Ying and P. Li. Distance metric learning revisited, *Joint European Conference on Machine Learning and Knowledge Discovery in Databases (ECML/PKDD)*, 2012.

COMPUTER SKILLS • Programming languages: Python, C++, MATLAB, SQL, PHP.

- Libraries: VLFeat, OpenCV, Liblinear.
- Deep learning frameworks: PyTorch, TensorFlow, Caffe, MatConvNet.
- Operating systems: Linux, Mac OS, Windows.

PROFESSIONAL
ACTIVITIES

- Reviewer for CVPR, AAAI, AISTATS, TPAMI.
- Mentor for Smallpeice Trust Residential course, 2014.
- Contributed speaker at International Conference on Approximation Theory and Applications, Hong Kong, 2013.