

CONTACT INFORMATION	<p>Senior Researcher in Computer Vision Tencent Technology (Shenzhen) Company Limited Tencent building, Nanshan District, Shenzhen P.R.China</p> <p><i>Tel:</i> +0086 13612818291 <i>E-mail:</i> <a href="mailto:freyaqcao@tencent.com">freyaqcao@tencent.com</a></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><b>Ph.D</b> in Computer Science <span style="float: right;"><b>12/2011 to 11/2015</b></span>  <a href="#">University of Exeter</a>, Exeter, UK          Thesis: Some Topics on Similarity Metric Learning          Supervisors: Prof. Yiming Ying and Prof. Richard Everson</p> <p><b>Master programme study</b> in Mathematics <span style="float: right;"><b>09/2010 to 11/2011</b></span>  <a href="#">Zhejiang University</a>, 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>B.Sc</b> in Mathematics <span style="float: right;"><b>09/2006 to 06/2010</b></span>  <a href="#">Hebei Normal University</a>, Hebei, China</p>
WORK AND ACADEMIC EXPERIENCE	<p><b>Senior Researcher in Computer Vision</b> <span style="float: right;"><b>09/2017 to present</b></span>          Youtu lab,          Technology (Shenzhen) Company Limited.</p> <p><b>Postdoc Researcher in Computer Vision</b> <span style="float: right;"><b>03/2015 to 09/2017</b></span>  <a href="#">Visual Geometry Group (VGG)</a>,          Department of Engineering Science,          University of Oxford.          Supervisor: Prof. Andrew Zisserman</p>
AWARDS	<ul style="list-style-type: none"> <li>• Nanshan Pilot Talent, Shenzhen, China, Oct 2018.</li> <li>• Overseas High-Caliber Personnel (Level C), Shenzhen, China, Feb 2018.</li> <li>• EPSRC Doctor Training Grant (DTG), UK, Dec 2011.</li> <li>• Outstanding undergraduate of Hebei province, China, Jul 2010.</li> </ul>
PUBLICATIONS	<p>[1] 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, <i>Proceedings of the IEEE International Conference on Computer Vision (ICCV Oral, 4.3% acceptance rate)</i>, 2019.</p>

- [2] 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.
- [3] 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.
- [4] 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.
- [5] 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.
- [6] Q. Cao. Some Topics on Similarity Metric Learning, PhD thesis, 2015.
- [7] Q. Cao, Z. Guo and Y. Ying. Generalization bounds for metric and similarity learning, *Machine Learning Journal* 102 (1), 115-132, 2015.
- [8] Q. Cao, Y. Ying and P. Li. Similarity metric learning for face recognition, *Proceedings of the IEEE International Conference on Computer Vision (ICCV)*, 2013.
- [9] 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, MATLAB, C++, SQL, PHP.

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

PROFESSIONAL  
ACTIVITIES

- Reviewer for AISTATS, 2016.
- Reviewer for AAAI Conference on Artificial Intelligence, 2015 (AAAI-15).
- Mentor for Smallpeice Trust Residential course, 2014.
- Contributed speaker at International Conference on Approximation Theory and Applications, Hong Kong, 2013.