WEIDI XIE

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EDUCATION University of Oxford, UK 2014 - 2018 Doctor of Philosophy (DPhil) Engineering Science • Thesis: Deep Neural Networks in Computer Vision and Biomedical Image Analysis • Advisors: Professor Alison Noble OBE FREng FRS & Professor Andrew Zisserman FRS • Examined by: Professor Andrea Vedaldi (internal), Professor Daniel Rueckert (external) University College London, UK 2012 - 2013 Master of Science (MSc) in Computer Graphics, Vision and Imaging • Thesis: Document Authorship Recognition with Machine Learning • Passed thesis with distinction Queen Mary, University of London, UK (Exchange Student) 2011 - 2012 Bachelor of Science (BSc) in Telecommunication Engineering with Management · Graduated with First-class Honours Beijing University of Posts and Telecommunications, China 2008 - 2011 Bachelor of Science (BSc) in Telecommunication Engineering Graduated with First-class Honours WORK Department of Engineering Science, University of Oxford. Nov 2017 - Present **EXPERIENCE** Postdoctoral Researcher in Visual Geometry Group, Seebibyte Project. MRC Laboratory for Molecular Cell Biology, University College London. Sep 2013 – Feb 2014 Research Assistant. **AWARDS &** Best Paper Award MICCAI workshop on Fetal and InFant Image Analysis, FIFI 2017. 2017 **SCHOLARSHIPS** Best Poster Award Functional Imaging and Modelling of the Heart, FIMH 2017. 2017 Google Oxford-Deepmind Graduate Scholarships Google DeepMind 2015 - 2017Oxford-DeepMind Graduate Scholarships in Machine Learning and Biomedical Image Analysis. China Oxford Scholarship Fund (COSF). 2014 - 2015 Magadalen Award For students with excellent academic record. Wolfson College, Oxford. 2015 Travel Award [1] Davis M. Vigneaulta*, Weidi Xie*, Carolyn Y. Ho, David A. Bluemke, and J. Alison Noble, **JOURNAL PUBLICATIONS** "Ω-Net: Fully Automatic, Multi-View Cardiac MR Detection, Orientation, and Segmentation with Deep Neural Networks". In: Medical Image Analysis, Volume 48, August 2018, Pages 95-106. (* indicates to equal contribution, joint first author, 5-Year Impact Factor: 5.417) [2] Ruobing Huang, Weidi Xie, and J. Alison Noble, "VP-Nets: Efficient Automatic Localization of Key Brain Structures in 3D Fetal Neurosonography". In: Medical Image Analysis, Volume 47, July 2018, Pages 127–139. (5-Year Impact Factor: 5.417) [3] Ana I.L. Namburete*, Weidi Xie*, Mohammad Yaqub, Andrew Zisserman, J. Alison Noble, "Fully-Automated Alignment of 3D Fetal Brain Ultrasound to A Canonical Reference Space Using Multi-task Learning". In: Medical Image Analysis, Volume 46, May 2018, Pages 1-14. (* indicates to equal contribution, , joint first author, 5-Year Impact Factor: 5.417) [4] Weidi Xie, J. Alison Noble, and Andrew Zisserman, "Microscopy Cell Counting And Detection with Fully Convolutional Regression Networks". In: Computer Methods in Biomechanics and Biomedical *Engineering*: *Imaging* & *Visualization*. **CONFERENCE** [5] Weidi Xie, Li Shen, and Andrew Zisserman, "Comparator Networks". In: European Conference on **PUBLICATIONS** Computer Vision (ECCV), 2018.

[6] **Weidi Xie** and Andrew Zisserman, "Multicolumn Networks on Face Recognition". In: British Machine Vision Conference (BMVC), 2018.

- [7] Qiong Cao, Li Shen, **Weidi Xie**, Omkar M. Parkhi, and Andrew Zisserman, "VGGFace2: A Dataset for Recognising Faces Across Pose and Age". In: *IEEE International Conference on Automatic Face and Gesture Recognition (F&G)*, 2018, Oral.
- [8] Ana I.L. Namburete, **Weidi Xie**, and J. Alison Noble, "Robust Regression of Brain Maturation from 3D Fetal Neurosonography using CRNs". In: *MICCAI Workshop on Fetal and InFant Image analysis. FIFI 2017*, Best Paper Award.
- [9] Davis M. Vigneaulta, **Weidi Xie**, David A. Bluemke, and J. Alison Noble, "Feature Tracking Cardiac Magnetic Resonance via Deep Learning and Spline Optimization". In: *Functional Imaging and Modelling of the Heart. FIMH 2017*, <u>Best Poster Award</u>.
- [10] **Weidi Xie**, J. Alison Noble, and Andrew Zisserman, "Microscopy Cell Counting with Fully Convolutional Regression Networks". In: *MICCAI 1st Deep Learning Workshop*, Munich, 2015.
- [11] **Weidi Xie**, J. Alison Noble, and Andrew Zisserman, "Layer Recurrent Neural Networks". Tech Report, https://openreview.net/pdf?id=rJJRDvcex.

PRESENTATIONS

- IEEE International Conference on Automatic Face and Gesture Recognition (F&G), Xi'an, China, 2018
- Deep Learning Workshop in MICCAI, Munich, Germany, 2015
- Microscopy Cell Counting with Fully Convolutional Networks, in Heidelberg Collaboratory for Image Processing Group, Heidelberg, Germany, 2015

PROFESSIONAL & ACTIVITIES

- **PROFESSIONAL &** Reviewer for MICCAI, ECCV.
 - Reviewer for IEEE Transactions on Medical Imaging.
 - Reviewer for IEEE Journal of Biomedical and Health Informatics.

LANGUAGES

- Chinese (Native)
- English (Full Professional Proficiency)

[CV compiled on 2018-07-17]