WEIDI XIE

• Department of Engineering Science, University of Oxford • weidi.xie@eng.ox.ac.uk • +44 (0) 7598730577

EDUCATION

University of Oxford, UK

- D.Phil. in Engineering Science — Oct 2014 – Jan 2018
  - Thesis: Deep Neural Networks in Computer Vision and Biomedical Image Analysis
  - Advisors: Professor Alison Noble and Professor Andrew Zisserman
  - Examined by: Professor Andrea Vedaldi (Internal), Professor Daniel Rueckert (External)

University College London, UK

- M.Sc. in Computer Graphics, Vision and Imaging — Sep 2012 – Aug 2013
  - Thesis: Document Authorship Recognition with Machine Learning (DISTINCTION)

Queen Mary, University of London, UK (Exchange Student)

- B.Sc. in Telecommunication Engineering with Management (First-class Honour) — Jun 2011 – Aug 2012

Beijing University of Posts and Telecommunications, China

- B.Sc. in Telecommunication Engineering — Sep 2008 – Aug 2011

WORK EXPERIENCE

Department of Engineering Science, University of Oxford.

- Postdoctoral Researcher in Visual Geometry Group. — Dec 2017- Now

MRC Laboratory for Molecular Cell Biology, University College London.

- Research Assistant. — Sep 2013 – Feb 2014

PUBLICATIONS

BIOMEDICAL IMAGE ANALYSIS

[2] **Weidi Xie***, Davis M. Vigneaulta*, Carolyn Y. Ho, David A. Bluemke, and J. Alison Noble, "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. (Impact Factor: 5.012, * indicates to equal contribution)

[3] 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. (Impact Factor: 5.012)

[1] **Weidi Xie***, Ana I.L. Namburete*, 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. (Impact Factor: 5.012, * indicates to equal contribution)

[4] 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.

[5] 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*, Best Poster Award.

[6] **Weidi Xie**, J. Alison Noble, and Andrew Zisserman, "Microscopy Cell Counting with Fully Convolutional Regression Networks". In: *MICCAI 1st Deep Learning Workshop*, Munich, 2015.

[7] **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*.

COMPUTER VISION

[8] **Weidi Xie**, Li Shen, and Andrew Zisserman, "Comparator Networks". Submitted to ECCV 2018.

[9] **Weidi Xie** and Andrew Zisserman, "Multicolumn Networks on Face Recognition". Submitted to BMVC 2018.

[10] Erika Lu, **Weidi Xie** and Andrew Zisserman, "When Tracking Met Counting: An Adaptable, Self-Similarity Counting Network". Submitted to BMVC 2018.

[11] 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.

[12] **Weidi Xie**, J. Alison Noble, and Andrew Zisserman, "Layer Recurrent Neural Networks". Tech Report, https://openreview.net/pdf?id=rJJRDvcex.

AWARDS & SCHOLARSHIPS

- Google Oxford-Deepmind Graduate Scholarships. Oct 2015 – Oct 2017
  Oxford-DeepMind Graduate Scholarships in Machine Learning and Biomedical Image Analysis.
- Magadalen Award, China Oxford Scholarship Fund (COSF). 2014 – 2015
  For students with excellent academic record.
- Travel Award, Wolfson College, Oxford . 2015

PRESENTATIONS

- Deep Learning Workshop in MICCAI, Munich, 2015
- Microscopy Cell Counting with Fully Convolutional Networks, in Heidelberg Collaboratory for Image Processing Group.

PROFESSIONAL & ACTIVITIES

- 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 2018-06-05*]