WEIDI XIE

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EDUCATION

University of Oxford, UK

- D.Phil. in Engineering Science — Oct 2014 – Jan 2018
  - Advisors: Professor Alison Noble and Professor Andrew Zisserman
  - Thesis: Deep Neural Networks in Computer Vision and Biomedical Image Analysis
    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 Seebibyte Project. — Dec 2017- Now
  - To carry out fundamental research to develop next generation computer vision methods that are able to analyse, describe and search image and video content with human-like capabilities. To transfer these methods to industry and to other academic disciplines (such as Archaeology, Art, Geology, Medicine, Plant sciences and Zoology).

MRC Laboratory for Molecular Cell Biology, University College London.

- Research Assistant. — Sep 2013 – Feb 2014

PUBLICATIONS

BIOMEDICAL IMAGE ANALYSIS

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

[2] **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*.

[3] **Weidi Xie***, Ana I.L. Namburete*, Mohammad Yaqub, Andrew Zisserman, J. Alison Noble, "Fully-Automated Standardized Reorientation of 3D Fetal Neurosonography Images using Multi-Task FCNs". In: *Medical Image Analysis*. (* refers to equal contribution)

[4] **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". Submitted to *Medical Image Analysis*. (* refers to equal contribution)

[5] 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*.

[6] 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.

[7] 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.

COMPUTER VISION

[9] Qiong Cao, Li Shen, **Weidi Xie**, Omkar M. Parkhi, and Andrew Zisserman, "VGGFace2: A Dataset for Recognising Faces Across Pose and Age". Accepted, to appear in *IEEE International Conference on Automatic Face and Gesture Recognition, 2018*. Arxiv preprint: https://arxiv.org/abs/1710.08092.

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

[11] **Weidi Xie** and Andrew Zisserman, “Multicolumn Networks on Face Recognition”. Submitted to BMVC 2018.

[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 2018-04-29*]