Curriculum Vitae of Sen He (何森)

CONTACT Alan Turing Building (BB), University of Surrey 0044-7751580133 INFORMATION GU2 7XH, Guildford, UK sen.he@surrey.ac.uk

RESEARCH Computer Vision, Machine Leaning, Attention Models in Computer Vision,

Interests Few-Shot Learning, Generative Models

EDUCATION University of Exeter, Exeter, UK

Ph.D., Computer Science, Nov 2016 - April 2020

• Thesis Topic: Visual Attention in Computer Vision (Thesis)

• Supervisor: Dr. Nicolas Pugeault

University of Edinburgh, Edinburgh, UK

MSc, Signal Processing and Communications, Sep 2015 - Sep 2016

Nanjing University of Posts and Telecommunications, Nanjing China

B.S., Communication Engineering, Sep 2011 - Jun 2015

WORKING Research Fellow May 2020-Present

EXPERIENCE Research Fellow at CVSSP, University of Surrey, working with Prof. Tao

Xiang and Dr. Yi-Zhe Song.

Summer Internship Summer 2019

Toshiba Cambridge Research Lab, Computer vision Group Project: Spherical CNN for Image Semantic Segmentation

PROJECTS EP/N035399/1-Co-Investigator

• EPSRC research grant Dec,2016–May,2018

• DEVA-Autonomous Driving with Emergent Visual Attention

Programming Language

SKILL • Python, Matlab, C

Machine Learning framwork

• Pytorch, Tensorflow

TEACHING Teaching Assistant Spring 2017

EXPERIENCES ECCM1416, Computational Mathematics

Instructor: Dr. Nicolas Pugeault Department of Computer Science,

University of Exeter

Teaching Assistant Winter 2018

ECM3423, Computer Graphics

Instructor: Dr. Anastasios (Tassos) Roussos

Department of Computer Science,

University of Exeter

Publications

1. **Sen He**, Wentong Liao, Michael Yang, Yi-Zhe Song, Bodo Rosenhahn, Tao Xiang. "Disentangled Lifespan Face Synthesis" *ICCV*, 2021

- Zhihe Lu, Sen He, Xiatian Zhu, Li Zhang, Yi-Zhe Song, Tao Xiang. "Simpler is Better: Few-shot Semantic Segmentation with Classifier Weight Transformer" ICCV,2021
- 3. **Sen He**, Wentong Liao, Michael Yang, Yongxin Yang, Yi-Zhe Song, Bodo Rosenhahn, Tao Xiang. "Context-Aware Layout to Image Generation with Enhanced Object Appearance" *CVPR*, 2021
- 4. **Sen He**, Wentong Liao, Hamed R. Tavakoli, Michael Yang, Bodo Rosenhahn, Nicolas Pugeault . "Image Captioning through Image Transformer" *ACCV*, 2020
- 5. Chao Zhang, **Sen He**, Stephan Liwicki. "A Spherical Approach to Planar Semantic Segmentation" BMVC,2020
- Sen He, Hamed R. Tavakoli, Ali Borji, Nicolas Pugeault. "Human attention in Image Captioning: Datasets and Analysis" ICCV, 2019
- 7. **Sen He**, Hamed R. Tavakoli, Ali Borji, Yang Mi, Nicolas Pugeault. "Understading and Visualizing Deep Visual Saliency Models" *CVPR*, 2019
- 8. **Sen He**, Kangin Dmitry, Yang Mi, Nicolas Pugeault. "Aggregated Sparse Attention for Steering Angle Prediction" *ICPR*, 2018
- 9. **Sen He**, Ali Borji, Yang Mi, Nicolas Pugeault. "What Catches the Eye? Visualizing and Understanding Deep Saliency Models" *arXiv:1803.05753*
- 10. **Sen He**, Nicolas Pugeault. "Deep saliency: What is learnt by a deep network about saliency?" 2nd Workshop on Visualisation for Deep Learning, ICML, 2017