

Shangzhe Wu

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EDUCATION

- since 2018 | **University of Oxford**
DPhil in Engineering Science
Advisor: Andrea Vedaldi, Visual Geometry Group
- 2014 - 2018 | **Hong Kong University of Science and Technology**
BSc (Double Major) in Computer Science;
and in Risk Management and Business Intelligence
- 2016 | **University of Michigan, Ann Arbor**
Exchange program in Computer Science

AWARDS

- 2021 | Outstanding Reviewer Award, CVPR 2021
- 2020 | Best Paper Award, CVPR 2020
- 2018 | Facebook Research Scholarship (3.5yr DPhil at Oxford)
- 2018 | HKUST Academic Achievement Medal (highest academic honor, top 1%)
- 2013 | First Prize in The Chinese High School Physics Olympiad, Provincial Level
- 2012 | Third Prize in Provincial High School Mathematics Olympiad

INTERNSHIPS

- 2020 | Research Intern at **Google Research**, NYC/London
Project: Unsupervised Image De-rendering

INVITED TALKS

Unsupervised Learning of 3D Objects in the Wild

- 2021 | MIT Vision and Graphics Seminar
- 2021 | Stanford Vision and Learning Lab

Unsupervised Learning of 3D Objects from Images

- 2021 | Multimedia Laboratory, Nanyang Technological University
- 2021 | Visual Intelligence Group, Fudan University
- 2020 | IMAGINE, École des Ponts ParisTech
- 2020 | 2nd Jittor Workshop on Deep Learning, Tsinghua University
- 2020 | Computer Vision Lab, University of Toronto
- 2020 | Graphics And Mixed Environment Seminar (GAMES)
- 2020 | Cambridge Machine Learning Systems Lab (CaMLSys)
- 2020 | CVPR Workshop on Fair, Data-Efficient and Trusted Computer Vision

ADVISED STUDENTS

- 2021 | Felix Wimbauer - MSc, University of Oxford
Master Thesis: "Self-supervised Single-Image 3D Face Relighting"
- 2021 | Jan-Hendrik Ruettinger - MSc, Technical University of Munich
Master Thesis: "Unsupervised Learning of 3D Objects from 2D Images"

ACADEMIC SERVICES

Workshop / Tutorial Organizer

- 2022 | ECCV Workshop on “Neural Geometry and Rendering: Advances and the Common Objects in 3D Challenge”
- 2021 | ICCV Workshop on “Unsup3D: Unsupervised 3D Learning in the Wild”

Reviewer

CVPR 2022, 2021, 2020, 2019; ICCV 2021, 2019; ECCV 2022, 2020; NeurIPS 2022, 2021, 2020; ICLR 2022; SIGGRAPH 2022, 2020; IJCV; TMLR; TIP; TCI; CVMJ

PUBLICATIONS

- [1] Felix Wimbauer, Shangzhe Wu, and Christian Rupprecht. “De-rendering 3D Objects in the Wild”. In: *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*. 2022.
- [2] Shangzhe Wu, Ameesh Makadia, Jiajun Wu, Noah Snavely, Richard Tucker, and Angjoo Kanazawa. “De-rendering the World’s Revolutionary Artefacts”. In: *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*. 2021.
- [3] Shangzhe Wu, Christian Rupprecht, and Andrea Vedaldi. “Unsupervised Learning of Probably Symmetric Deformable 3D Objects from Images in the Wild”. In: *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)* (2021).
- [4] Tim Y. Tang, Daniele De Martini, Shangzhe Wu, and Paul Newman. “Self-Supervised Learning for Using Overhead Imagery as Maps in Large-Scale Range Sensor Localisation”. In: *International Journal of Robotics Research (IJRR)* (2021).
- [5] Shangzhe Wu, Christian Rupprecht, and Andrea Vedaldi. “Unsupervised Learning of Probably Symmetric Deformable 3D Objects from Images in the Wild”. In: *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*. 2020. **(Best Paper Award)**.
- [6] Tim Y. Tang, Daniele De Martini, Shangzhe Wu, and Paul Newman. “Self-Supervised Localisation between Range Sensors and Overhead Imagery”. In: *Robotics: Science and Systems (RSS)*. 2020.
- [7] Yongyi Lu, Shangzhe Wu, Yu-Wing Tai, and Chi-Keung Tang. “Image Generation from Sketch Constraint Using Contextual GAN”. In: *European Conference on Computer Vision (ECCV)*. 2018.
- [8] Shangzhe Wu, Jiarui Xu, Yu-Wing Tai, and Chi-Keung Tang. “Deep High Dynamic Range Imaging with Large Foreground Motions”. In: *European Conference on Computer Vision (ECCV)*. 2018.

Preprints

- [9] Shangzhe Wu*, Tomas Jakab*, Christian Rupprecht, and Andrea Vedaldi. “DOVE: Learning Deformable 3D Objects by Watching Videos”. In: *arXiv preprint arXiv:2107.10844* (2021).
- [10] Zirui Wang, Shangzhe Wu, Weidi Xie, Min Chen, and Victor Adrian Prisacariu. “NeRF—: Neural Radiance Fields Without Known Camera Parameters”. In: *arXiv preprint arXiv:2102.07064* (2021).