Yuge Shi

Machine Learning PhD Student,
University of Oxford

w : yugeten.github.io
e : yshi@robots.ox.ac.uk

· Representation learning · Generative models
· Disentanglement · Multimodal learning

Publications

Gradient Matching for Domain Generalisation,
available on **arXiv** (2021);

Relating by Contrasting: A Data-efficient Framework for Multimodal Generative Models,
published in **ICLR** 2021;

Variational Mixture-of-Experts Autoencodersfor Multi-Modal Deep Generative Models,
published in **Neurips** 2019;

Action Anticipation with RBF Kernelized Feature Mapping RNN,
published in **ECCV** 2018;

Skills

Programming Languages	Python, MATLAB, R, Verilog
Environments & Libraries	PyTorch, Tensor-Flow, Pyro, Keras, MatConvNet, ROS
Applications and Tools	Adobe Illustrator & Photoshop, LaTeX
Languages	Mandarin, English, Cantonese

References

References can be provided upon request.

Education

since 2018 **DPhil in Engineering Science**

University of Oxford

- **Supervisors:** Philip Torr, Siddharth Narayanaswamy.
- **Research area:** Representation learning, generative models, multimodal learning.

2014 − 18 **Bachelor of Engineering (Honours)**

Australian National University (ANU)

- **Majors:** Electronics and Mechatronics.
- **Courses:** Robotics, control systems, telecommunication systems, system engineering and project management.
- **GPA**: 6.5/7, First Class Honours.

Research Experience

2020 **Research Intern, Facebook AI Research**

- Research area: Domain generalisation, active learning;
- Supervisors: Gabriel Synnaeve, Nicolas Usunier.
- Publication: Gradient Matching for Domain Generalisation (arXiv 2021).

2018 **Research Intern, Australian National University**

- Research area: Action antiicpation, sequence prediction;
- Supervisors: Richard Hartley, Basura Fernando.
- Publication: Action Anticipation with RBF Kernelized Feature Mapping RNN (ECCV, 2018)

2017 − 18 **Student Scholar, Data61, Australia**

- Research area: Interpretable AI, ML application;
- Supervisors: Zhidong Li, Jianlong Zhou.

Outreach

Since 2021 **Co-founder to GirlsWhoML**

- GirlsWhoML is a volunteer-based initiative that aims at providing free education and mentorship in Machine Learning for people who identify as female/non-binary;
- As co-founder, I organised a 5 Lecture *introduction to Machine Learning* series for 80 students in University of Oxford, with the help of 50 volunteers that signed up from all around the world;
- After receiving a generous donation from Microsoft, we are currently working on a summer series that will benefit more students from different universities.

Since 2019 **Sponsorship officer, OxWoCS**

- The Oxford Women in Computer Science Society (OxWoCS) aims to support and promote women in computer science;
- I work closely with various sponsors of OxWoCS to organise events for students with exposure to a diverse range of industries.