

Education

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| PhD in Machine Learning and Modern Statistics – University of Oxford | Sept 2022–2026 |
| Member of the StatML CDT and OxCSML group | |
| Supervised by Prof. Yee Whye Teh | |
| MEng in Information and Computer Engineering – University of Cambridge | Sept 2018–2022 |
| BEng First Class with Distinction (ranked 5/288) | |
| Department prize for best 3 rd year project | |
| Top ranked final exam performance in Information Engineering Instrumentation and Control area | |
| MEng First Class with Distinction (ranked 8/261) | |
| Received Distinction for dissertation – Supervised by Prof. Phil Woodland | |
| Several Engineering Department and Jesus College awards/scholarships each year for exam performance | |

Research Experience

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| PhD Publication Project | 2023 |
| “RAVL: Value Learning for the Edge-of-Reach Problem in Model-Based Offline Reinforcement Learning” | |
| Supervised by Prof. Yee Whye Teh. Work done in collaboration with Cong Lu. | |
| NeurIPS 2023 Agent Learning in Open-Endedness Workshop | |
| Under review at ICLR 2024 | |
| StatML CDT Mini-Project 1 of 2 | 2023 |
| Investigating plasticity loss and the effects of non-stationary training in deep neural networks | |
| Supervised by Prof. Yee Whye Teh and Chris Gamble (deepmind) | |
| StatML CDT Mini-Project 2 of 2 | 2023 |
| Sphering transformations for stable equivariant normalization in graph neural networks | |
| Supervised by Prof. Yee Whye Teh. Work done in collaboration with Sheheryar Zaidi. | |
| Research Placement – University of Cambridge | Summer 2022 (8 weeks) |
| Identifiable variational autoencoders for disentangled causal representation learning | |
| Supervised by Prof. José Miguel Hernández-Lobato. Work done in collaboration with Wenlin Chen. | |
| MEng Dissertation – University of Cambridge | Sept 2021–2022 |
| End-to-End Speech Recognition using Neural Transducers | |
| Developed more efficient method of graph-based decoding for speech recognition in transducer language models. | |
| Supervised by Prof. Phil Woodland. Work done in collaboration with Tony Zheng. | |

Industry Experience

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| Software Engineering Intern - Graphcore | Summer 2021 (10 weeks) |
| Worked on a team within the AI Applications Group to implement extensive codebase demonstrating several image recognition benchmarks on Graphcore’s IPU in TensorFlow2. This involved coordinating loading of different stages of the model onto different IPU processing cores to maximize training and inference efficiency. | |
| Machine Learning Mentorship – Featurespace | Summer 2020 (10 weeks) |
| Chose to work on abstract reasoning using deep learning (see Kaggle Abstraction and Reasoning Challenge) | |
| Software Engineering Intern – Softwire | Dec 2019 |
| Website development – worked primarily on asynchronistic API calls part (using Javascript and React) | |
| Data Analytics Intern – Infosys | Summer 2019 (10 weeks) |
| Reproduced results from several recent papers on aspect-based sentiment analysis (using Tensorflow and Keras) | |

Other

Languages: Python, C++, Bash

Frameworks: PyTorch, Tensorflow

Organizational/Teaching roles: Cambridge Windsurfing Secretary (2020-2022)

Volunteer secondary school maths tutor (2018-2019)