

# Matthew T. Jackson

matthewtjackson.com  
jackson@robots.ox.ac.uk

## Education

University of Oxford – DPhil in Engineering Science	2021-2025
Member of the AIMS CDT. Supervised by Jakob Foerster and Shimon Whiteson.	
University College London – MSc in Machine Learning	2020-2021
Distinction, 87% – Dean’s List. Supervised by Tim Rocktäschel and Edward Grefenstette.	
University of Cambridge – BA in Computer Science	2017-2020
First-Class Honors, 86% – Senior Scholar, ranked 2/99 in cohort. Highly commended (top 5) dissertation. Supervised by Pietro Liò.	

## Experience

Amazon – Software Engineering Intern	2020
Worked in the Alexa Knowledge Group, developing Java software to rank the relevance of natural language answers to user questions. Implemented features running on all Alexa Q&A queries.	
Arm – Software Engineering Intern	2019
Worked in the Machine Learning Software Group, developing Arm’s neural network inference engines in C++. Reviewed deep learning research and added support for new architectures. A selection of contributions may be found on the <i>ArmNN GitHub</i> .	
Cubica Technology – Software Engineering Intern	2018
Developed a Python script to identify and label reoccurring identities across large-scale video databases. Implemented and trained random forest models for head pose estimation, in addition to a tracking algorithm for video summarization.	

## Publications

Policy-Guided Diffusion <b>Matthew T. Jackson</b> , Michael T. Matthews, Cong Lu, Jakob N. Foerster, Shimon Whiteson <i>Under review</i>	
Discovering Temporally-Aware Reinforcement Learning Algorithms <b>Matthew T. Jackson*</b> , Chris Lu*, Louis Kirsch, Robert T. Lange, Shimon Whiteson, Jakob N. Foerster <i>Under review</i>	
Discovering General Reinforcement Learning Algorithms with Adversarial Environment Design <b>Matthew T. Jackson</b> , Minqi Jiang, Jack Parker-Holder, Risto Vuorio, Chris Lu, Gregory Farquhar, Shimon Whiteson, Jakob N. Foerster <i>NeurIPS 2023</i>	[arXiv]
Hypernetworks for Meta-Reinforcement Learning Jake Beck, <b>Matthew T. Jackson</b> , Risto Vuorio, Shimon Whiteson <i>CoRL 2022</i>	[arXiv]
Multi-Modal Fusion by Meta-Initialization <b>Matthew T. Jackson*</b> , Shreshth Malik*, Michael T. Matthews, Yousuf Mohamed-Ahmed <i>FARSCOPE Robotics Workshop 2022; Best Poster Award</i>	[arXiv]

## Academia

Tutor
Reinforcement Learning (PhD course), Machine Learning (Master’s course)
Reviewer
ICLR, ACML, NeurIPS workshops (DeepRL, ALOE, Diffusion Models)

## Software

Languages	Frameworks
Python, C++, Java, OCaml, HTML/CSS, Bash	JAX, PyTorch, Hugo