

Research Associate in Artificial Intelligence and Machine Learning, Oxford University, United Kingdom.

The Artificial Intelligence and Machine Learning group at the Department of Computer Science has a vacancy for a Research Associate in Reinforcement Learning. Reporting to Professor Shimon Whiteson and working in close collaboration with Katja Hofmann at Microsoft Research (MSRC), you will be conducting original research in the area of Reinforcement Learning. The position incorporates a one day a week secondment to MSRC, and upon completion of this contract, is expected to be followed by a 6 month stint at MSRC.

The project will focus on developing and analysing state-of-the-art reinforcement learning (RL) methods for application to video games, and aims to tackle two key challenges. Firstly, building effective game AI with RL requires dramatically scaling up existing tools for cooperative multi-agent RL, in which teams of agents must collaborate to complete tasks. Doing so requires new methods for performing multi-agent credit assignment and multi-agent exploration in large state and action spaces. Secondly, effective game AI must also be able to transfer effectively to new scenarios, such as new game levels and versions, without having to learn from scratch. Doing so requires new methods for transfer and meta-learning in RL that scale to the complexity of modern video games.

You will hold a PhD/DPhil (or be close to completion) in computer science or related discipline together with relevant experience, and have a strong publication record in machine learning or closely-related area. Experience with reinforcement learning and/or machine learning for gaming is highly desirable. The closing date for applications is 12.00 noon on 21 June 2019.

Our staff and students come from all over the world and we proudly promote a friendly and inclusive culture. Diversity is positively encouraged, through diversity groups and champions, for example cs.ox.ac.uk/aboutus/women-cs-oxford/index.html, as well as a number of family-friendly policies, such as the right to apply for flexible working and support for staff returning from periods of extended absence, for example maternity leave.