

# CONOR F. HAYES

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google scholar

conorfhayes.info

Galway, Ireland

## Education

Doctor of Philosophy (PhD) in Computer Science

National University of Ireland Galway

September 2019 - Present Galway Ireland

- My research focuses on Distributional Multi-Objective Reinforcement Learning and its applications to the real world
- Supervisors: Dr. Diederik M. Roijers, Dr. Enda Howley & Dr. Patrick Mannion

Master of Science (MSc) in Computer Science

National University of Ireland Galway

September 2018 - August 2019 Galway Ireland

- GPA 4.0
- Supervisors: Dr. Enda Howley & Dr. Patrick Mannion
- Research Areas: Machine Learning, Artificial Intelligence, Multi-Agent Systems, Multi-Objective Decision Making, Reinforcement Learning
- Postgraduate Thesis: *Dynamic Economic Emissions Dispatch with Thresholded Lexicographic Ordering*

## Professional Experience

Teaching Assistant

National University of Ireland Galway

September 2019 - Present Galway, Ireland

- Courses: Programming for Data Analytics (R), Computer Systems (R), Agents, Multi-Agent Systems & Reinforcement Learning, & Enterprise Java Programming (Java)

Software Engineer

TQS Integration

May 2015 - August 2018 San Francisco, USA

- Designed, implemented and validated large-scale real-time data historian systems
- Consulted for Biotech industry and ran projects for Johnson & Johnson, Genentech, Shire
- Consulted for energy industry and ran projects for Pacific Gas Electric (PG&E)

## Relevant Experience

Conference Workshop Organiser

Adaptive Learning Agents Workshop (ALA)

September 2020 - Present

- I am currently on the organising committee for the Adaptive Learning Agents Workshop that will run at AAMAS 2022.
- I previously organised the ALA workshop for AAMAS 2021 which was held virtually.

## Scholarships

Hardiman Scholarship Recipient

National University of Ireland Galway

September 2019 - Present

## Skills

Reinforcement Learning

Multi-Objective Decision Making

Artificial Intelligence

Machine Learning

Planning

Optimisation

Editing

Writing

Project Management

Research

## Programming Languages

Python



Java



R



## Selected Publications

- Conor F. Hayes, Roxana Radulescu et al. *A Practical Guide to Multi-Objective Reinforcement Learning and Planning*. Under Review: JAAMAS (2021).
- Conor F. Hayes, Diederik M. Roijers et al. *Decision Theoretic Planning for the Expected Scalarised Returns*. Proceedings of the 21st International Conference on Autonomous Agents and Multi Agent Systems (2022).
- Conor F. Hayes, Mathieu Reymond et al. *Distributional Monte Carlo Tree Search for Risk-Aware and Multi-Objective Reinforcement Learning*. Proceedings of the 20th International Conference on Autonomous Agents and Multi Agent Systems (2021).
- Conor F. Hayes, Timothy Verstraeten et al. *Dominance Criteria and Solution Sets for the Expected Scalarised Returns*. The Adaptive Learning Agents Workshop at AAMAS (2021).