

LEONARD HINCKELDEY

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SUMMARY

PhD candidate at the University of Edinburgh, working on agentic AI for real-world uses such as assistive robotics. My research focuses on world models, multi-agent systems, and ad-hoc teamwork — with the goal of training generalizable agents that can coordinate effectively with previously unseen partners.

EDUCATION

The University of Edinburgh PhD in AI and Robotics Focus: Ad-Hoc Teamwork, Reinforcement Learning, Multi-Agent Reinforcement Learning <i>Supervised by Subramanian Ramamoorthy; member of the Centre for AI in Assistive Autonomy. Part-funded by the Honda Research Institute (EU).</i>	01/2024 - Present <i>Edinburgh, UK</i>
London School of Economics and Political Science MSc Applied Social Data Science Focus: Reinforcement Learning, Natural Language Processing, Deep Learning	09/2022 - 09/2023 <i>London, UK</i>
SOAS University of London BSc Economics Focus: Econometrics and Causal Inference, Development Economics	10/2019 - 07/2022 <i>London, UK</i>

PUBLICATIONS

Conference Papers

Leonard Hinckeldey, Elliot Fosong, Elle Miller, Rimvydas Rubavicius, Trevor McInroe, Fan Zhang, Patricia Wollstadt, Stefano V. Albrecht, Subramanian Ramamoorthy (2026). *Assistax: A Multi-Agent Hardware-Accelerated Reinforcement Learning Benchmark for Assistive Robotics*. Reinforcement Learning Journal. [[arXiv](#)], [[Project Website](#)].

Kale-ab Abebe Tessera, **Leonard Hinckeldey**, Riccardo Zamboni, David Abel, Amos Storkey (2026). *Remembering the Markov Property in Cooperative Multi-Agent Reinforcement Learning*. Proceedings of the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS). **Oral presentation**. [[OpenReview](#)].

RESEARCH PROJECTS

RLHF Post-Training on NanoGPT (2023) [[code](#)]
A simple PPO implementation that post-trains NanoGPT to generate lipogrammatic Shakespearean-style text.

RESEARCH EXPERIENCE

Research Assistant 08/2023 - 03/2024
Part-time, *The London School of Economics and Political Science* *London, UK*

- Worked on the [GENIAL](#) project studying the impact of LLMs on undergraduate teaching.
- Automated a data collection pipeline for ChatGPT conversations of 150+ student participants.
- Analyzed and visualized quantitative text data based on chat histories.

TEACHING & VOLUNTEERING

[Robot and Reinforcement Learning](#) 09/2025 - Present
Graduate Teaching Assistant, *School of Informatics, University of Edinburgh* *Edinburgh, UK*

- Teaching tutorials on Deep Reinforcement Learning; Behaviour and Imitation Learning; and Vision-Language-Action Models.
- Designed coursework on Deep RL for continuous control.

RL & Agents Reading Group

09/2025 - Present

Co-Host and Organiser

INDUSTRY EXPERIENCE

Business Intelligence Analyst

06/2021 - 09/2021

Internship, *Northern Data*

Frankfurt, Germany

- Implemented the first dashboard of the company BI tool, showcasing data center KPIs; now used by the operations team.
- Designed the first central SQL database for operations-relevant internal data.

Impact Analyst

07/2018 - 12/2018

Internship, *LGT Venture Philanthropy*

Zürich, Switzerland

- Supported impact measurement for portfolio projects in emerging markets.

AWARDS & HONORS

UKRI CASE PhD Studentship in partnership with the Honda Research Institute Europe (HRI-EU), 2023.

Awarded for academic excellence and research potential in AI and Robotics.

TECHNICAL SKILLS

ML & AI	JAX, PyTorch, TensorFlow
Programming	Python, R, Stata, SQL
Tools	Git, Slurm, Kubernetes, HPC
Languages	German (native), English (native), Spanish (B1)