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Summary

Research Scientist at Huawei, working on LLMs and Multi-Agent Reinforcement Learning. Co-author of the Multi-Agent Reinforcement Learning textbook published by *The MIT Press*. Published in *NeurIPS, ICML*, and other top-tier conferences and journals ($1,000+$ citations, h-index=10).

Experience

Research Scientist, Huawei – London, UK — 2023 – present

- Led a team project to develop an LLM-agent modular framework capable of interacting and learning from various environments (e.g., operating systems or web browsers). *Fine-tuned LLMs* (with PyTorch and HuggingFace) using *SFT and RL* to improve the agent's performance in those environments.
- Designed and trained a *Decision Transformer* to solve the PCB placement problem on real-world data.

Research Scientist, Intern, NVIDIA – San Francisco, California (remote) — May – Dec. 2022

- Developed and published (*ICRA 2023*) a novel method for generating plausible *autonomous vehicle (AV)* trajectories in occluded spaces using *variational autoencoders*.

Research Assistant, ENECIA – Athens, Greece — 2017 – 2018

- Collaborated with UC Berkeley researchers in a startup environment to create power-consumption prediction models and EV battery charging plans, by employing *Gaussian processes, model predictive control, and similarity-based* methods.

Education

University of Edinburgh, PhD in Multi-Agent Reinforcement Learning — 2019 – 2023

- Used reinforcement learning algorithms (e.g., *A3C, PPO, DQN*) to develop novel multi-agent methods. Published as first author in 2x *NeurIPS, ICML,* and *TMLR*. Supervised by Dr Stefano Albrecht and examined by Dr Frans Oliehoek.
- Was the *Teaching Assistant* of the MSc-level course on reinforcement learning. Led the lecture sessions covering Deep Reinforcement Learning, and designed the coursework assignment. I also provided mentorship and supervised two master's students throughout the completion of their MSc thesis projects.

University of Edinburgh, MScR in Robotics and Autonomous Systems — 2018 – 2019

- Awarded Distinction. Courses on Machine Learning, Reinforcement Learning, and Robotics.

Technical University of Crete, BSc & intgr. MSc (5 yrs) in Electrical and Computer Engineering — 2009 – 2016

- Thesis was awarded full marks (10/10) and led to peer-reviewed publication. Studied Computer Science, Electronics, and Telecommunications with elective courses on Artificial Intelligence, Game theory, and Multi-Agent Systems.

Selected Publications – Google Scholar

Multi-Agent Reinforcement Learning: Foundations and Modern Approaches — 2024
Co-author — Textbook by The MIT Press.

Pareto Actor-Critic for Equilibrium Selection in Multi-Agent Reinforcement Learning — 2023
Joint first author — In Transactions on Machine Learning Research (TMLR).

Benchmarking Multi-Agent Deep Reinforcement Learning Algorithms in Cooperative Tasks — 2021
Joint first author — In Advances in Neural Information Processing Systems (NeurIPS).

Scaling Multi-Agent Reinforcement Learning with Selective Parameter Sharing — 2021
First author — In International Conference on Machine Learning (ICML).

Shared Experience Actor-Critic for Multi-Agent Reinforcement Learning — 2020
First author — In Advances in Neural Information Processing Systems (NeurIPS).

Skills And Additional Experience

Programming: Python, C/C++, Bash | PyTorch, HuggingFace, PyTorch Lightning, NumPy, pandas.
Invited Talks and Seminars: Berkeley Multi-Agent Seminar Group (2022), UoE (2020 – 2023), Motion2AI (2023).
Guest Lectures: University College London (2023), KTH Royal Institute of Technology (2024).
Open-source Projects: E-PyMARL (400+ stars), MARL codebase (250+ stars), RWARE (250+ stars), LBF (130+ stars).