Nathan Monette

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EDUCATION

University of Oxford

Oxford, UK

M.Sc. in Advanced Computer Science (Incoming)

October 2025 - September 2026

University of California, Irvine

Irvine, CA

B.Sc. (Hons) in Computer Science

September 2021 - June 2025

- GPA: 3.7 (undergraduate), 4.0 (graduate).
- Selected coursework (undergraduate): Linear Algebra I, II, and III, Project in Reinforcement Learning.
- Selected coursework (graduate): Algorithmic Game Theory, Probabilistic Learning, Learning in Graphical Models, Deep Learning, Scientific Computing

RESEARCH/PROJECT EXPERIENCE

University of Oxford

Oxford, UK

Research Intern with Prof. Jakob Foerster

June 2024 - Present

- Independently proposed a project to Prof. Foerster, leading to a fully-funded internship.
- Led writing, experimental design, and method design for a <u>paper</u> on utilising min-max optimisation to derive theoretical guarantees for unsupervised environment design, published at Reinforcement Learning Conference 2025.
- Ongoing experiments with in-context learning for behavior cloning and offline reinforcement learning.

University of California, Irvine

Irvine, CA

Undergraduate Researcher with Prof. Ioannis Panageas

April 2023 - June 2025

- Managed experiments for a project on RL in adversarial team Markov games in PyTorch.
- Re-implemented models and training code in JAX to improve experiment runtime.
- Learned techniques relating to min-max, nonconvex, and convex optimization.
- Mentored younger students interested in research.

University of California, Irvine

Irvine, CA

Undergraduate Researcher with Prof. Roy Fox

October 2024 - June 2025

- Continuing development of RL environments for control tasks with multi-agent aspects.
- Ongoing experiments aiming to leverage offline data to accelerate large-scale multi-agent reinforcement learning tasks.

University of California, Irvine

Irvine, CA

Undergraduate Researcher with Shion Fukuzawa (teaching fellow)

April 2024 - June 2024

- Developed the backend for an educational tool for quantum computing, which was used to teach the CHSH game for a 100+ student lecture the following year.
- Explored "n-player" variants of the CHSH game and quantifications of entanglement.

Hack at UCI

Irvine, CA February 2023

ZotScheduler

Achieved a second place prize out of over 60 teams, with over 400 total participants in the hackathon.

- Cooperated with two teammates to construct a working app in less than 36 hours.
- Utilized ensemble tree regression models (XGBoost), and search algorithms to recommend schedules to students based on a list of potential classes.
- Modeled professor-rating-regressions with 70% accuracy.

APPOINTMENTS

UC Irvine Computer Science Department Curriculum Committee

Irvine, CA

Student Representative

Sept 2023 - Present

- Served as the sole representative of over 2,000 undergraduate students to a faculty committee in charge of curriculum design.
- Authored the first draft of the department's new undergraduate degree requirements.
- Presented community feedback in course evaluation and design from around 100 students and alumni.

SKILLS & INTERESTS

Proficient: Python, JAX, NumPy, LaTeX

Competent: C++, TensorFlow, PyTorch, SciKit-Learn

Interests: I am interested in game theory and reinforcement learning as well as pedagogy, specifically regarding the design of curriculum and how to properly create the requisite background for students who want to learn ML.