

Fiona Xie

EDUCATION

Purdue University Aug. 2025 - Present
PhD Computer Science

- **Purdue Andrews Fellowship** (1% of PhDs) and **Presidential Excellence Phd Award** (4% of PhDs)

Carnegie Mellon University, School of Computer Science Aug. 2019 - May 2023
B.S. Artificial Intelligence, Minor in Business Administration (**3.97/4.0 GPA**)

- **Relevant Coursework:** Machine Learning, Deep Learning, Computer Vision, Search Engines

PUBLICATIONS

Energy-Based Transfer for Reinforcement Learning.

Z. Deng, J. Ghosh, F. Xie, Y. Lu, K. Sycara, and J. Campbell. (*Under Review*). 2025

Introspective Action Advising for Interpretable Transfer Learning.

J. Campbell, Y. Guo, F. Xie, S. Stepputtis, and K. Sycara. *CoLLAs*. 2023

RESEARCH EXPERIENCE

Purdue, Collaborative AI for Machines and People (CAMP) Lab Aug. 2025 - Present
Research Assistant (PI: Joseph Campbell)

- Reinforcement Learning and LLMs

CMU, Advanced Agent - Robotics Technology Lab Jan. 2023 - Jul. 2025
Research Assistant (PI: Katia Sycara)

- Investigated knowledge transfer between policies in multi-task reinforcement learning settings.
- Applied transfer learning across Atari environments, using the Atari game *Air Raid* as the source task.

EXPERIENCE

Netflix, Search and Recommendations Jul. 2023 - Jul. 2025
Software Engineer

- Developed evaluation pipelines and metrics using human-annotated data to assess recommendation quality and LLM-based conversational search systems.
- Conducted large-scale latency and scalability experiments ensuring parity between LLM retrieval models.

Meta, Search Monetization May 2022 - Aug. 2022
Software Engineer Intern

- Built and launched new ML model type on FB marketplace and FB search with a 2% increase in EBR(Event Based Revenue) and 3% increase in CTR(Click Through Rate).

Google, Google Research Platforms Jan 2022 - Apr. 2022
Software Engineer Intern

- Reduced GPU/TPU resource allocation propagation time by 10 minutes by streamlining quota management infrastructure.

Facebook, Ads Core ML Eng May 2021 - Aug. 2021
Software Engineer Intern

- Improved large-scale ads ML models (serving billions of predictions daily) with architecture changes and cleaner training data, achieving a 0.6% lift.

CMU CS Department Aug. 2020 - Dec. 2022
Teaching Assistant

- Mathematical Foundations for Computer Science (Fall 2020, 2021, 2022) and Parallel and Sequential Data Structures and Algorithms (Spring 2021): Taught 1-2 recitations per week for a class of 30 students and held office hours 2 hrs a week.

SKILLS

Programming Languages Python, Scala, Java, SQL, C++, C, Matlab, R

Frameworks/Libraries Pandas, NumPy, Matplotlib, TorchRL, RLib, PyTorch, \LaTeX