

Ziyao Mou

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Computer Science
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Education **Johns Hopkins University** *Aug. 2024–Dec. 2025 (expected)*
M.S.E. in Computer Science
Master's Thesis: Learning to Defer under Expert Drift.

Huazhong University of Science and Technology *Sept. 2018–June 2022*
B.Eng. in Computer Science
Bachelor's Thesis: Design and Implementation of a Resource Scheduling System for Workflow Applications on a Serverless Platform.

Research **Ziyao Mou, Andrea Wynn, Eric Nalisnick.** *Feb. 2025–Present*
Learning to Defer under Expert Drift. [pdf](Under Review)

- Designed an expert-aware learning-to-defer framework that models temporal expert drift by conditioning the deferral head on recent expert outcomes via a sequence model.
- Learned history-aware strategies that proactively route hard or critical cases to humans when reliability dips, improving safety under time-varying expertise.
- Evaluated on image classification, medical diagnosis, and hate-speech detection with simulated and real expert drift.
- Achieved higher system accuracy and better deferral efficiency than prior L2D baselines.

Ziyao Mou, Ha Manh Bui, Anqi Liu. *June 2025–Present*
Multiple Domain Recalibration for Model-based Reinforcement Learning.

- Designed and implemented a multi-domain calibration framework for model-based reinforcement learning to improve robustness under domain shifts.
- Conducted experiments in the MuJoCo suite, demonstrating faster convergence, evaluating in-domain and out-of-domain uncertainty calibration.

Employments **Software Development Engineer** *Jul. 2023–Jul. 2024*
Alibaba Group, Taobao Search Team
Led full-stack development of Taobao's AI-powered shopping assistant, delivering a cross-platform user interface with intelligent features such as product comparison, recommendations, and travel planning.

	Software Development Engineer <i>Jul. 2022–Jul. 2023</i> Alibaba Group, Platform Infrastructure Team Built a user experience reporting & telemetry platform that ingests multimedia feedback and logs, with a BERT-based sentiment clustering pipeline and screenshot similarity detection.
	Software Development Intern <i>Jun. 2021–Aug. 2021</i> Alibaba Group, Buyer Base Team Designed and implemented an edge-computing streaming rendering full-stack architecture using Serverless technologies to improve responsiveness on low-end and older devices.
Teaching	Johns Hopkins University Course Assistant, Machine Learning: Artificial Intelligence System Design and Development, Fall 2025
Awards	Bronze Award, National Innovation and Entrepreneurship Competition(Challenge Cup) Team Lead, AidocX Huazhong University of Science and Technology, China First Prize, Physics Competition for High School Students Zhejiang University Affiliated High School, China
Skills	Programming: Python, Java, C/C++, SQL, TypeScript, HTML/CSS. Cloud & DevOps & Big Data Technologies: AWS (S3, Lambda), Docker, Kubernetes, MongoDB, Redis. Machine Learning & Data: PyTorch, NumPy, Pandas, Scikit-learn. Tools & Version Control: Git.
Languages	English (Advanced), Mandarin Chinese (Native).