Xueguang Lyu

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Educational Experience

2020–now   **Northeastern University**, *PhD Candidate in Computer Science*, Boston, MA.
Research in **Multi-Agent Reinforcement Learning**, GPA: 3.8

2016–2018   **Northeastern University**, *Master of Science in Computer Science*, Boston, MA.
Concentrated on **Artificial Intelligence**, GPA: 3.8

2012–2016   **University of California, Irvine** , *Bachelor of Science in Informatics*, Irvine, CA.
Concentrated on **Computer Human Interaction**, GPA: 3.7

Honors and Rewards

2020   **Graduate Fellowship**, Northeastern University.

2021   **Best Paper Nominee**, International Conference on Autonomous Agents and Multiagent Systems.

2021   **Best Paper Nominee**, International Symposium on Multi-Robot and Multi-Agent Systems.

2022   **Spotlight**, The Multi-disciplinary Conference on Reinforcement Learning and Decision Making.

Journal Publication

2023   **Journal of Artificial Intelligence Research**, ***Xueguang Lyu***, *Andrea Baisero, Brett Daley, Yuchen Xiao, Christopher Amato*.
On Centralized Critics in Multi-Agent Reinforcement Learning

Conference Publications

AAAI   **2022**, ***Xueguang Lyu***, *Andrea Baisero, Yuchen Xiao, Christopher Amato*.
A Deeper Understanding of State-Based Critics in Multi-Agent Reinforcement Learning

AAMAS   **2021**, ***Xueguang Lyu***, *Yuchen Xiao, Brett Daley, Christopher Amato*.
Contrasting Centralized and Decentralized Critics in Multi-Agent Reinforcement Learning

MRS   **2021**, *Yuchen Xiao,* ***Xueguang Lyu***, *Christopher Amato*.
Local Advantage Actor-Critic for Robust Multi-Agent Deep Reinforcement Learning

AAMAS   **2020**, ***Xueguang Lyu***, *Christopher Amato*.
Likelihood Quantile Networks for Coordinating Multi-Agent Reinforcement Learning

Patent

2020   **US Patent**, *Titus Woo, Wei Ting Kuo,* ***Xueguang Lyu***, *Venkatesh Komma*.
System and method for generating emoji mashups with machine learning

Talks and Presentations

2022   **RLDM**, *On Trade-offs of Centralized Critics in Multi-Agent Reinforcement Learning*.
Brown University, Providence, RI

2022   **Invited Talk at CyLab**, *Policy Gradient Methods in Multi-Agent Reinforcement Learning*.
Carnegie Mellon University, Pittsburgh, PA

2024   **Multi-Agent Learning Seminar**, *Understanding Centralized Critics*.
Virtual

Peer-Reviewing Services

2021	**Conference Reviewer**, AAMAS-2021.
2021	**Conference Reviewer**, NeurIPS 2021.
2022	**Conference Reviewer**, AAAI 2022.
2022	**Conference Reviewer**, ICML 2022.
2022	**Conference Reviewer**, NeurIPS 2022.
2023	**Conference Reviewer**, ICRA 2023.
2023	**Conference Reviewer**, AAMAS 2023.
2023	**Journal Reviewer**, IEEE Robotics and Automation Letters (RA-L).
2023	**Conference Reviewer**, ICML 2023.
2023	**Conference Reviewer**, NeurIPS 2023.
2023	**Journal Reviewer**, Journal of Machine Learning Research (JMLR).
2024	**Conference Reviewer**, ICLR 2024.
2024	**Conference Reviewer**, AAMAS 2024.
2024	**Journal Reviewer**, Autonomous Agents and Multi-Agent Systems, Springer Nature.
2024	**Conference Reviewer**, ICML 2024.
2024	**Conference Reviewer**, RLC 2024.
2024	**Conference Reviewer**, NeurIPS 2024.
2025	**Conference Reviewer**, AAMAS 2025.
2025	**Conference Reviewer**, ICLR 2025.
2025	**Conference Reviewer**, ICML 2025.
2025	**Journal Reviewer**, Journal of Machine Learning Research (JMLR).

Professional Experience

Jan - June 2023	**Applied Scientist Co-op**, *Amazon Robotics*, Boston, MA. Simulation-Free On-Robot Reinforcement Learning for Robotic Manipulation
May - Dec 2019	**Software Engineer**, *PayPal*, San Jose CA. Financial Transaction framework, recommendation systems, Bayesian methods for black-box analysis
May - Dec 2017	**Software Engineer Co-op**, *PayPal*, San Jose CA. Developed a scalable Recommendation Engine framework Filed 2 U.S. patents: black-box predictions & natural language translation models

Teaching Experience

Dec 2017 - June 2018	**Teaching Assistant**, *Northeastern University*, Boston, MA. For class *Advance Algorithm* Hold recitations and office hours.
Jan - Mar 2022	**Teaching Assistant**, *Northeastern University*, Boston, MA. For class *Advanced Reinforcement Learning*. Derive homeworks and solutions. Hold office hours and other activities.

Membership of Scientific Organizations

Since 2023	**Member**, Multi-Agent Learning Seminar.
Since 2023	**Member**, Association for the Advancement of Artificial Intelligence (AAAI).
Since 2024	**Program Committee (PC) Member**, International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS).