Dingyang Chen

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Education

PhD, Computer Science May 2021 - May 2025
University of South Carolina, Columbia, SC, USA
Advisor: Qi Zhang

MEng, Electrical Engineering and Computer Sciences Aug 2018 - May 2019
University of California, Berkeley, Berkeley, CA, USA

BS, Computer Science Aug 2014 - May 2018
University of Illinois at Urbana-Champaign, Champaign, IL, USA

Professional Experience

Amazon, Seattle, WA Jan 2025 - Present
Applied Scientist

- Finetune LLMs to detect and assess defects in Amazon's customer service chatbot responses.

Amazon, Bellevue, WA May 2024 - Aug 2024
Applied Scientist Intern

- Developed models for cost-of-goods prediction to improve forecasting accuracy.

Siemens, Remote May 2022 - Aug 2022
Research Intern

- Applied reinforcement learning algorithms to optimize power system reconfiguration.

Publications

Conference Proceedings

1. **Reinforcement Learning with Euclidean Data Augmentation for State-Based Continuous Control.**
   Jinzhu Luo, Dingyang Chen, Qi Zhang
   Neural Information Processing Systems (NeurIPS) 2024.
2. **Efficient Sequential Decision Making with Large Language Models.**
   Dingyang Chen, Qi Zhang, Yinglun Zhu
   Empirical Methods in Natural Language Processing (EMNLP) 2024.
3. E(3)**-Equivariant Actor-Critic Methods for Cooperative Multi-Agent Reinforcement Learning.**
   Dingyang Chen, Qi Zhang
   International Conference on Machine Learning (ICML) 2024.
4. **Context-Aware Bayesian Network Actor-Critic Methods for Cooperative Multi-Agent Reinforcement Learning.**
   Dingyang Chen, Qi Zhang
   International Conference on Machine Learning (ICML) 2023.

5. **Communication-Efficient Actor-Critic Methods for Homogeneous Markov Games.**
   Dingyang Chen, Qi Zhang
   International Conference on Learning Representations (ICLR) 2022.

Refereed Workshop Proceedings

6. **Convergence Rates of Bayesian Network Policy Gradient for Cooperative Multi-Agent Reinforcement Learning.**
   Dingyang Chen, Zhenyu Zhang, Xiaolong Kuang, Xinyang Shen, Ozalp Ozer, Qi Zhang
   Workshop on Bayesian Decision-making and Uncertainty at NeurIPS 2024.
7. **Convergence and Price of Anarchy Guarantees of the Softmax Policy Gradient in Markov Potential Games.**
   Dingyang Chen, Qi Zhang, Thinh T. Doan
   Decision Awareness in Reinforcement Learning Workshop at ICML 2022.
8. **A Meta-Gradient Approach to Learning Cooperative Multi-Agent Communication Topology.**
   Qi Zhang, Dingyang Chen
   Workshop on Meta-Learning at NeurIPS 2021.

Professional Service

Conference Reviewer
AAAI 2025, ICML 2024 & 2025, ICLR 2024, NeurIPS 2023, and the NeurIPS 2022 Deep RL Workshop

Journal Reviewer
IEEE TNNLS

Teaching Experience

Graduate Teaching Assistant - Visualization Tools, University of South Carolina [FA24]
Graduate Teaching Assistant - Algorithmic Design I, University of South Carolina [FA23]