Qiwen Cui

Paul G. Allen School of Computer Science & Engineering qwcui@cs.washington.edu qwcui.github.io

RESEARCH INTERESTS

Learning Theory, Reinforcement Learning, Game Theory

EDUCATION

University of Washington, Seattle

Sep. 2021 - Present

- Ph.D. student in Computer Science & Engineering (GPA 4.0/4)
- Advisor: Simon Shaolei Du

Peking University

Sep. 2017 - July. 2021

- B.S. in Statistics (GPA 3.7/4)
- Advisor: Zaiwen Wen

PUBLICATIONS

1. Haque Ishfaq*, **Qiwen Cui***, Viet Nguyen, Alex Ayoub, Zhuoran Yang, Zhaoran Wang, Doina Precup, Lin F. Yang

Randomized Exploration for Reinforcement Learning with General Value Function Approximation

In International Conference on Machine Learning (ICML) 2021

2. **Qiwen Cui**, Lin F. Yang

Minimax sample complexity for turn-based stochastic game Uncertainty in Artificial Intelligence (UAI) 2021

3. **Qiwen Cui**, Qingxiao Chen, Pufan Liu, Debin Liu, Zaiwen Wen Clinical decision support model for tooth extraction therapy derived from electronic dental records

The Journal of Prosthetic Dentistry 2021

4. **Qiwen Cui**, Lin F. Yang

<u>Is Plug-in Solver Sample-Efficient for Feature-based Reinforcement Learning?</u>

Conference on Neural Information Processing Systems (NeurIPS) 2020

PREPRINTS

1. **Qiwen Cui***, Zhihan Xiong*, Maryam Fazel, Simon S. Du

Learning in Congestion Games with Bandit Feedback

2. Qiwen Cui, Simon S. Du

<u>Provably Efficient Offline Multi-agent Reinforcement Learning via Strategy-wise Bonus</u>

3. Xinqi Wang, Qiwen Cui, Simon S. Du

On Gap-dependent Bounds for Offline Reinforcement Learning

4. Qiwen Cui, Simon S. Du

When is Offline Two-Player Zero-Sum Markov Game Solvable?

- 5. Zhihan Xiong*, Ruoqi Shen*, **Qiwen Cui***, Simon S. Du Near-Optimal Randomized Exploration for Tabular MDP
- 6. Minghan Yang, Dong Xu, **Qiwen Cui**, Zaiwen Wen, Pengxiang Xu A Multi-Step Matrix-Product Natural Gradient Method for Deep Learning

AWARDS/HONORS

Paul G. Allen First-Year Graduate Student Fellowship

Elite Undergraduate Training Program of Applied Mathematics (top 15%)

1st Prize in Mathematics Competition of Chinese College Student

1st Prize in National High School Mathematics Competition

PROFESSIONAL ACTIVITIES

Paper Reviewer: Neurips 2022, ICML 2022, Neurips 2021, ICML 2021, UAI2021