### Qiwen Cui

# Paul G. Allen School of Computer Science & Engineering <a href="mailto:qwcui@cs.washington.edu">qwcui@cs.washington.edu</a> qwcui.github.io

#### RESEARCH INTERESTS

Machine Learning, Learning Theory, Reinforcement Learning, Game Theory

#### **EDUCATION**

#### University of Washington, Seattle

Sep. 2021 - Present

- Ph.D. student in Computer Science & Engineering
- Advisor: Simon Shaolei Du

#### **Peking University**

Sep. 2017 - July. 2021

- B.S. in Statistics
- 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 Learning Representations (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

Is Plug-in Solver Sample-Efficient for Feature-based Reinforcement Learning? Conference on Neural Information Processing Systems (NeurIPS) 2020

#### **PREPRINTS**

- Zhihan Xiong\*, Ruoqi Shen\*, Qiwen Cui\*, Simon S. Du Near-Optimal Randomized Exploration for Tabular MDP <a href="https://arxiv.org/abs/2102.09703">https://arxiv.org/abs/2102.09703</a>
- 2. Minghan Yang, Dong Xu, **Qiwen Cui**, Zaiwen Wen, Pengxiang Xu A Multi-Step Matrix-Product Natural Gradient Method for Deep Learning <a href="https://arxiv.org/abs/2106.07454">https://arxiv.org/abs/2106.07454</a>

#### AWARDS/HONORS

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: ICML 2021, UAI2021