# **DUOHAN ZHANG**

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Department of Statistics, University of Wisconsin Madison

#### SHORT BIO

Duohan Zhang is currently a master student of statistics and data science in the Department of Statistics, University of Wisconsin Madison. He is very fortunate to work on reinforcement learning(RL) projects with Professor Josiah Hanna. Prior to that, he got the bachelor's degree in University of Science and Technology of China, majoring in statistics. He is interested in computer vision, statistics and machine learning, especially (deep) reinforcement learning.

### **EDUCATION**

### University of Wisconsin Madison

Department of Statistics, master in Statistics and Data Science

GPA: 3.82/4.0

### University of Science and Technology of China

Department of Statistics, bachelor in statistics

GPA: 86.47/100

Courses related to my research interests:

Statistical Learning: (100/100); Theory of Probability I: (94/100), a PhD level course; Theory of Probability II: a PhD level course, ranked 1st; Introduction to Statistical Learning Inference: (93/100);

Real Analysis: (100/100); Functional Analysis: (93/100).

#### RESEARCH EXPERIENCE

# Robust On-Policy Sampling(ROS)

2021/12 - current

Madison, Wisconsin

2021/9 - 2023/5

Hefei, China 2018/9 - 2022/6

University of Wisconsin Madison Advisor: Prof. Josiah Hanna

- We studied the distinction between on-policy data and on-policy sampling.
- We proposed an off-policy sampling algorithm (ROS) that can produce on-policy distributed data, and thus the algorithm is more data efficient than on-policy sampling.
- In this work, I was mainly responsible for the theoretical part.
- I am working on a follow-up project that combines ROS with Proximal Policy Optimization (PPO) algorithm.

#### Online forgetting process for moderate linear regression

2021/2 - 2021/8

The university of science and technology of China

Advisor: Prof. Xiao Guo

- We proposed a moderate dimensional regression model in which past data has to be deleted while features are increasing at the same time.
- Unfortunately, we didn't continue to complete this project after I came to the United States.

### **PUBLICATION**

Robust On-Policy Sampling for Data-efficient Policy Evaluation.

Rujie Zhong, **Duohan Zhang**, Lukas Schäfer, Stefano V Albrecht, Josiah P. Hanna.

NeurIPS-2022

### AWARDS

# Student scholarship from USTC

2019,2020

School of Management, University of Science and Technology of China

# **SKILLS**

# **Programming Languages and Tools**

Python, Pytorch, Open AI gym, C++, R, LaTeX.

# Language

TOEFL: 100(R 26, L 23, S 23, W 28).

GRE: 323+4.0(V 153, Q 170).