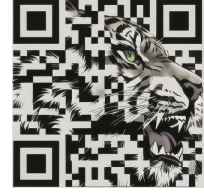


JIAXUAN WANG

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EDUCATION

Ph.D. at the University of Michigan, Ann Arbor

Sep 2017-April 2022

Computer Science and Engineering

Advisor: [Jenna Wiens](#)

GPA: 4.00 / 4.00

Research interests: Model interpretability; Alignment; Time-series analysis; Transfer/multitask learning; Non convex optimization; Temporal conditional shift; Computer vision; Deep reinforcement learning; Causal inference; Basketball analytics

Computational skills: PyTorch; Python; C++; Javascript; Matlab; R;

Bachelors of Science in Engineering, Ann Arbor

Sep. 2013 - Dec. 2016

Computer Science major and Mathematics minor

GPA: 3.96 / 4.00

Directed research: Computer vision; Basketball analytics

EMPLOYMENT

Senior AI research scientist, GE Healthcare

April 8 2024 - Present

Developing AI algorithms to improve perinatal care.

- Developed a chatbot that assist Labor & Delivery clinicians by providing quick access to hospital protocols and patient data during labor monitoring sessions, showcased at [HLTH 2024](#).
- Exploring novel methods to increase the generalizability and robustness of LLM by incorporating known symmetries into a prompt optimization model.

Research scientist in machine learning, Meta

Jun. 6 2022 - April 1 2024

- Key contributor in developing a reinforcement learning system to deter malicious actors from stealing user data on Facebook and Instagram.
- Proposed and implemented a feature attribution framework to debug and monitor distribution shift for the reinforcement learning agent used in production.
- Developed the duo-llama system that utilized a fine-tuned large language model (LLM) to save human labeling cost while enhancing LLM's ability on low resource languages through machine translation. The resulting system significantly outperformed the production classifier on 4 already supported languages, while enabling the new classifier to handle 17 languages.

Research Intern, Adaptive Systems and Interaction Group, Microsoft Research

Jun. 1 - Aug.21 2020

Mentor: [Scott Lundberg](#)

Proposed a novel explanation method, Shapley Flow, that unifies and avoids the pitfall of 3 previous methods.

Software Engineering Intern, NLP group, Bloomberg L.P. (New York)

Jun. 7 - Aug.19 2016

Mentors: [Konstantine Arkoudas](#) and [Srivas Prasad](#)

Algorithms for natural language parsing in financial chart domain: C++; SVM; PCFG

Research Assistant, Computer vision lab, University of Michigan

Oct. 2014 - Jan. 2016

Advisor: [Jia Deng](#)

Focus: Human action dataset collection; Amazon Mechanical Turk; Feature extraction; Rotation equivariant network

PUBLICATIONS (* denotes equal contribution)

1. [Learning Concept Credible Models for Mitigating Shortcuts](#)

Jiaxuan Wang, Sarah Jabbour, Maggie Makar, Jenna Wiens

Proceedings of the 36th Conference on Neural Information Processing Systems (NeurIPS), 2022

2. [Shapley Flow: A Graph-based Approach to Interpreting Model Predictions](#)

Jiaxuan Wang, Jenna Wiens, Scott Lundberg

Proceedings of the 24th International Conference on Artificial Intelligence and Statistics (AISTATS), 2021

3. [AdaSGD: Bridging the gap between SGD and Adam](#)

Jiaxuan Wang, Jenna Wiens

arXiv preprint, 2020

4. [Relaxed Parameter Sharing: Effectively Modeling Time-Varying Relationships in Clinical Time-Series](#)

Jeeheh Oh*, **Jiaxuan Wang***, Shengpu Tang, Michael Sjoding, Jenna Wiens

In Proceedings of the 4th Machine Learning for Healthcare Conference, 2019

5. [Learning Credible Models](#)

Jiaxuan Wang, Jeeheh Oh, Haozhu Wang, Jenna Wiens

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2018

6. [The Advantage of Doubling: A Deep Reinforcement Learning Approach to Studying the Double Team](#)

Jiaxuan Wang*, Ian Fox*, Jonathan Skaza, Nick Linck, Satinder Singh, Jenna Wiens

MIT Sloan Sports Analytics Conference, 2018

7. [Learning to Exploit Invariances in Clinical Time-Series Data using Sequence Transformer Networks](#)

Jeeheh Oh, **Jiaxuan Wang**, and Jenna Wiens

In Proceedings of the 4th Machine Learning for Healthcare Conference, 2018

8. [HICO: A Benchmark for Recognizing Human-Object Interactions in Images](#)

Yu-Wei Chao, Zhan Wang, Yugeng He, **Jiaxuan Wang**, Jia Deng

International Conference on Computer Vision (ICCV) 2015

TECHNICAL REPORTS

1. [Using feature attribution to debug and monitor distribution shift for a production ML system](#)

Jiaxuan Wang

2023

SERVICES

Reviewer @ MLHC 2023

Reviewer @ NeuRIPS 2022

Reviewer @ AISTATS 2022

Reviewer @ ICLR 2022

Reviewer @ AISTATS 2021

Reviewer @ NeuRIPS 2020

Reviewer @ NeuRIPS 2019

Reviewer @ MLHC 2021

Reviewer @ MLHC 2020
Volunteer @ Michigan AI symposium 2020
Reviewer @ SSAC 2020
Reviewer @ MLHC 2019
Reviewer @ SSAC 2019
Volunteer @ Michigan AI symposium 2019