# **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: <u>Jenna Wiens</u> GPA: 4.00 / 4.00

Research interests: Model interpretability; Time-series analysis; Transfer/multitask learning; Non convex optimization; Feature selection; 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**

## Research scientist in machine learning, Meta

Jun. 6 2022 - Present

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. 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

## 2. AdaSGD: Bridging the gap between SGD and Adam

Jiaxuan Wang, Jenna Wiens

arXiv preprint, 2020

# 3. 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

## 4. Learning Credible Models

**Jiaxuan Wang**, Jeeheh Oh, Haozhu Wang, Jenna Wiens ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2018

- 5. 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
- 6. <u>Learning to Exploit Invariances in Clinical Time-Series Data using Sequence Transformer Networks</u>
  Jeeheh Oh, **Jiaxuan Wang**, and Jenna Wiens
  In Proceedings of the 4th Machine Learning for Healthcare Conference, 2018
- 7. 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

#### PAPERS IN SUBMISSION

1. Learning Concept Credible Models for Mitigating Shortcuts **Jiaxuan Wang**, Sarah Jabbour, Maggie Makar, Jenna Wiens

#### **SERVICES**

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

### **INTEREST**

Basketball since 3 years old Bouldering for < 1 year Violin since 5 years old Guitar for 5 years