Ruohan Zhan

☎ (650)272-1613 ✉ rhzhan@stanford.edu

EDUCATION

Stanford University *09/2017 - 03/2022(expected)*
Ph.D. in Computational and Mathematical Engineering - GPA: 4.05/4.00 advisor: Susan Athey
Research Interests: causal inference, statistics, machine learning.

Peking University *09/2013 - 07/2017*
B.S. in Mathematics - GPA: 3.86/4.00

WORKING PAPER

Confidence Intervals for Policy Evaluation in Adaptive Experiments *05/2019-present*
joint work with Viror Hadad, David A. Hirshberg, Stefan Wager and Susan Athey

- Statistical inference on adaptively collected bandits data
- Weighted AIPW estimator with consistency and asymptotic normality
- Heuristic weights with empirical perfect coverage

INDUSTRIAL EXPERIENCE

Google LLC, Mountain View *06/2019-09/2019*
Research Intern, Perception

- Developed deep generative models to embed information into images with robustness to image distortions (submitted)

Cubist Systematic Strategies, LLC, New York *06/2018-09/2018*
Summer Research Analyst, Equity Trading

- Developed advanced machine learning algorithms and methodologies to analyze large amount of equity-based data
- Alpha seeking and alpha combination, added positive value to the algorithmic trading system of the group
- Built a C++ interface of developed model for production

OTHER RESEARCH PROJECTS

Safety Masked Reinforcement Learning (submitted) *10/2018-12/2019*
joint work with Maxime Bouton and Mykel Kochenderfer

- Designed a safety-enhanced, scalable, model-free RL algorithm for MDPs in both learning and deployment processes.

Machine Comprehension on SQuAD using Bi-Directional Attention Flow *01/2018-03/2018*
CS 224N, Natural Language Processing with Deep Learning, Stanford University, teamed with Daisy Ding

- Applied RNN with Bi-Directional Attention Flow to SQuAD dataset for machine comprehension

PUBLICATION

- **Ruohan Zhan**, Bin Dong. *CT Image Reconstruction by Spatial-Radon Domain Data-Driven Tight Frame Regularization*, SIAM Journal on Imaging Sciences, 9(3), 1063-1083, 2016.
- Baichuan Yuan, Sathya R. Chitturi, Geoffrey Iyer, Nuoyu Li, Xiaochuan Xu, **Ruohan Zhan**, Rafael Llerena, Jesse T. Yen, Andrea L. Bertozzi. *Machine Learning for Cardiac Ultrasound Time Series Data*, SPIE Medical Imaging 2017.

SELECTED HONORS

- D.E. Shaw Exploration Fellowship *08/2019*
- First Prize of 2018 Citadel Datathon at Stanford (Citadel Spotlight) *10/2018*
- TOTAL Innovation Fellowship, Stanford *08/2018, 08/2019*