ERIC ZHAN

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EDUCATION

California Institute of Technology

2016 - Present

Ph.D. Candidate, Computing & Mathematical Sciences, GPA: 3.8

Cornell University

2012 - 2016

B.A. Computer Science and Mathematics summa cum laude, GPA: 4.0

RESEARCH & ACADEMIC EXPERIENCE

Machine Learning Research Assistant at Caltech (Advisor: Yisong Yue)

Sept. 2016 - Present

- Research in sequential decision making, focusing on developing new methods for imitation learning and spatiotemporal reasoning inspired by generative models, weak supervision, and reinforcement learning.
- Proposed thesis topic: Generative Behavior Modeling with Programmatic Structure.

Teaching Experience

Jan. 2016 - Present

- Caltech Research Mentor: CS101 Projects in Machine Learning.
- Caltech Teaching Assistant: CS159 Advanced Topics in Machine Learning.
- Cornell Teaching Assistant: CS4820 Algorithms, CS4850 Math Foundations for the Information Age.

Honors & Awards

• Cornell Computer Science Honors Program summa cum laude.

2016

• Pauline and Irving Tanner Dean Scholar.

2012

• Honorable Mention at 42nd International Physics Olympiad.

2011

Conference Reviewing

• NeurIPS 2020

PUBLICATIONS

Ameesh Shah*, **Eric Zhan***, Jennifer Sun, Abhinav Verma, Yisong Yue, Swarat Chaudhuri. Learning Differentiable Programs with Admissible Neural Heuristics. *In submission*, 2020.

Eric Zhan, Albert Tseng, Yisong Yue, Adith Swaminathan, Matthew Hausknecht. Learning Calibratable Policies using Programmatic Style-Consistency. *ICML 2020*.

Yukai Liu, Rose Yu, Stephan Zheng, **Eric Zhan**, Yisong Yue. NAOMI: Non-Autoregressive Multiresolution Sequence Imputation. *NeurIPS 2019*.

Eric Zhan, Stephan Zheng, Yisong Yue, Long Sha, Patrick Lucey. Generating Multi-Agent Trajectories using Programmatic Weak Supervision. *ICLR 2019*.

Oliver Stephenson, Tobias Koehne, **Eric Zhan**, Brent Cahill, Zachary Ross, Mark Simons, Sang-Ho Yun. Deep Learning-based Damage Mapping with InSAR Coherence Time Series. *AGU Fall Meeting 2019*.

Eric Zhan, Stephan Zheng, Yisong Yue. MAGnet: Generating Long-Term Multi-Agent Trajectories. Bayesian Deep Learning workshop, NeurIPS 2017.

^{*}equal contribution

INDUSTRY EXPERIENCE

Research Intern at Argo AI (Tracking & Prediction)

June 2020 - Present

• Developing new methods for trajectory forecasting.

Research Intern at Microsoft Research (Reinforcement Learning)

June 2018 - Aug. 2018

- Investigated novel methods for calibrating agents to specific playstyles for playing Atari games via RL & IL.
- Implemented and benchmarked various state-of-the-art RL & IL algorithms in Project Athens codebase.

Software Engineering Intern at LinkedIn

May 2015 - Aug. 2015

• Implemented new messaging features for LinkedIn's desktop and mobile web experience.

Software Engineering Intern at Yahoo

May 2014 - Aug. 2014

• Studied user behavior and factors that affect user retention rate.