# Marvin Zhang

## Education

# University of California, Berkeley

Ph.D., Computer Science

Advisers: Pieter Abbeel, Sergey Levine.

August 2016 - Present.

## B.A., Computer Science

GPA: 4.00 (Highest Distinction).

August 2012 - May 2016.

## Research

# University of California, Berkeley

Graduate Student Researcher

Berkeley Artificial Intelligence Research (BAIR) Lab.

August 2016 - Present.

## Undergraduate Researcher

UC Berkeley Robot Learning Lab (RLL).

January 2014 - August 2016.

# Teaching

## University of California, Berkeley

Course Instructor

Structure and Interpretation of Computer Programs (CS 61A).

Summer 2016.

#### Teaching Assistant

Introduction to Machine Learning (CS 189/289A).

Spring 2016.

#### Teaching Assistant

Introduction to Artificial Intelligence (CS 188).

Fall 2015.

### Teaching Assistant

Structure and Interpretation of Computer Programs (CS 61A).

Spring 2014, Fall 2014, Spring 2015.

# Awards and Fellowships

NDSEG Fellowship, September 2017 - Present.

NSF Fellowship, Declined.

UC Berkeley EECS Departmental Fellowship, August - December 2016.

UC Berkeley Outstanding Graduate Student Instructor Award, May 2016.

UC Berkeley EECS Warren Dere Design Award, April 2016.

CRA Outstanding Undergraduate Researcher Honorable Mention, December 2015.

UC Berkeley EECS Honors Degree Program, August 2014 - May 2016.

## **Publications**

Michael Janner, Justin Fu, Marvin Zhang, Sergey Levine.

When to Trust Your Model: Model-Based Policy Optimization.

NeurIPS, 2019. ICML Workshop on Generative Modeling and Model-Based Reasoning for Robotics and AI, 2019. arXiv 1906.08253.

Marvin Zhang\*, Sharad Vikram\*, Laura Smith, Pieter Abbeel, Matthew Johnson, Sergey Levine. SOLAR: Deep Structured Latent Representations for Model-Based Reinforcement Learning. ICML, 2019. NeurIPS Infer to Control Workshop, 2018. NeurIPS Deep Reinforcement Learning Workshop, 2018. arXiv 1808.09105.

Yevgen Chebotar\*, Karol Hausman\*, **Marvin Zhang\***, Gaurav Sukhatme, Stefan Schaal, Sergey Levine. **Combining Model-Based and Model-Free Updates for Trajectory-Centric Reinforcement Learning.** ICML, 2017. **Best paper award**, RSS Workshop on New Frontiers for Deep Learning in Robotics, 2017. arXiv 1703.03078.

Marvin Zhang\*, Xinyang Geng\*, Jonathan Bruce\*, Ken Caluwaerts, Massimo Vespignani, Vytas SunSpiral, Pieter Abbeel, Sergey Levine.

Deep Reinforcement Learning for Tensegrity Robot Locomotion.

ICRA, 2017. NIPS Deep Reinforcement Learning Workshop, 2016. arXiv 1609.09049.

Marvin Zhang, Zoe McCarthy, Chelsea Finn, Sergey Levine, Pieter Abbeel. Learning Deep Neural Network Policies with Continuous Memory States. ICRA, 2016. NIPS Reasoning, Attention, Memory Workshop, 2015. NIPS Deep Reinforcement Learning Workshop, 2015. arXiv 1507.01273.