

# Michael Zhang

michael@cs.toronto.edu  $\diamond$  <https://www.cs.toronto.edu/~michael/>

## EDUCATION

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- University of Toronto** *2018 - Present*  
Doctor of Philosophy, Computer Science  
Advised by Professor Jimmy Ba
- University of California, Berkeley** *2017 - 2018*  
Master of Science, Electrical Engineering and Computer Science GPA: 4.000  
Advised by Professor Pieter Abbeel
- University of California, Berkeley** *2014 - 2017*  
Bachelor of Arts, Computer Science GPA: 4.000  
Graduated with Highest Honors (top 3% of class)

## RESEARCH AND INDUSTRY EXPERIENCE

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- Vector Institute** 2018 - Present  
*Student Researcher* *Toronto, Ontario*  
· Research on deep learning and reinforcement learning.
- Google** Feb 2020 - June 2020  
*Research Intern* *Toronto, Ontario*  
· Research on offline reinforcement learning advised by Mohammad Norouzi.
- NextAI** 2019  
*Scientist in Residence* *Toronto, Ontario*  
· Provide scientific and technical support to start-ups selected in NextAI accelerator.
- LinkedIn** Summer 2018  
*Software Engineer Intern* *Dublin, Ireland*  
· Built natural language models to understand what members write about on LinkedIn.
- Berkeley Artificial Intelligence Research** 2016 - 2018  
*Student Researcher* *Berkeley, California*  
· Develop reinforcement learning algorithms for training real-world robots, object tracking, and solving sparse reward tasks.
- Workday** Summer 2016  
*Data Science Intern* *Pleasanton, California*  
· Model and predict problems that may occur for companies going live on the platform.

## PUBLICATIONS

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### **Autoregressive Models for Offline Reinforcement Learning**

Michael R. Zhang, Tom Le Paine, Ofir Nachum, Cosmin Paduraru, George Tucker, Ziyu Wang, Mohammad Norouzi

International Conference on Learning Representations (ICLR) 2021

### **Benchmarks for Deep Off-Policy Evaluation**

Justin Fu, Mohammad Norouzi, Ofir Nachum, George Tucker, Ziyu Wang, Alexander Novikov, Mengjiao Yang, Michael R. Zhang, Yutian Chen, Aviral Kumar, Cosmin Paduraru, Sergey Levine, Tom Le Paine

International Conference on Learning Representations (ICLR) 2021

## **Objective Social Choice: Using Auxiliary Information to Improve Voting Outcomes**

Silviu Pitis, Michael R. Zhang

International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS) 2020

## **Lookahead Optimizer: $k$ steps forward, 1 step back**

Michael R. Zhang, James Lucas, Geoffrey Hinton, Jimmy Ba

Neural Information Processing Systems (NeurIPS) 2019

## **Reverse Curriculum Generation for Reinforcement Learning**

Carlos Florensa, David Held, Markus Wulfmeier, Michael Zhang, Pieter Abbeel

Conference on Robot Learning (CoRL) 2017

## **Probabilistically Safe Policy Transfer**

David Held, Zoe McCarthy, Michael Zhang, Fred Shentu, Pieter Abbeel.

IEEE International Conference on Robotics and Automation (ICRA) 2017

## **SELECTED HONORS**

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**National Science Foundation Graduate Research Fellowship, 2018** (declined)

### **Siebel Scholar, 2018**

National award to 90 graduate students for outstanding academic performance and leadership

### **UC Berkeley Outstanding Graduate Student Instructor Award, 2017**

Award given to the top 10% of teaching assistants based on faculty nominations and reviews

### **UC Berkeley Leadership Award**

Merit-based scholarship for leadership impacting academic, work, and community

## **TEACHING**

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**Vector Insite: Deep Learning Applications:** Fall 2020

**University of Toronto CSC421/2516: Neural Networks and Deep Learning:** Winter 2019

**University of Toronto CSC2541: Deep Reinforcement Learning:** Fall 2018

**UC Berkeley CS170: Introduction to Algorithms:** Spring 2018

**UC Berkeley CS189: Introduction to Machine Learning:** Spring 2017, Fall 2017

**UC Berkeley CS70: Discrete Mathematics and Probability:** Spring 2016, Fall 2016

## **LEADERSHIP AND SERVICE**

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**Conference reviewing** ICLR (2020,2021), ICML 2020

**Self-Organizing Conference on Machine Learning** November 2019

Led breakout session on deep learning and social chair

**Her Code Camp Volunteer** September 2019

**Robot Learning Lab Outreach** 2017 - 2018

Coordinate lab outreach program to provide tours and robot demo to visitors of various ages

**Berkeley AI & AI4All Camp Volunteer** June 2017

**Machine Learning at Berkeley** 2017

Led technical consulting project to delight images with Unity Technologies

**Computer Science Mentors** 2016

Develop materials and lead small group tutoring sessions

## **INVITED TALKS**

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**Toronto Machine Learning Society Conference**

November 2019

**AI Squared Forum**

September 2019

**Google Brain**

August 2019

**Vector Endless Summer School (Optimization)**

February 2019