Christopher Xie

Contact Information	*E-mail:* `chrisdxie@gmail.com`, `chrisxie@cs.washington.edu` *Website:* `https://chrisdxie.github.io/`

Research Interests Machine Learning, Artificial Intelligence, Computer Vision, Robotics

Education

Ph.D., University of Washington   September 2015 - Present
    Computer Science and Engineering

Master of Science, University of Washington   June 2017
    Computer Science and Engineering

Bachelor of Science, University of California, Berkeley   May 2015
    Electrical Engineering and Computer Science

Research Experience

Graduate Research Assistant   September 2015 - Present
University of Washington – Seattle, WA

Undergraduate Research Assistant   September 2013 - August 2015
University of California, Berkeley – Berkeley, CA

Publications

Christopher Xie, Yu Xiang, Zaid Harchaoui, Dieter Fox. "Object Discovery in Videos as Foreground Motion Clustering". *IEEE Conference on Computer Vision and Pattern Recognition - CVPR, 2019.*

Christopher Xie, Emily Fox, Zaid Harchaoui. "A Simple Adaptive Tracker with Reminiscences". *Proc. IEEE Int. Conf. on Robotics and Automation - ICRA, 2019.*

Christopher Xie, Avleen Bijral, Juan Lavista Ferres. "NonSTOP: A NonSTationary Online Prediction Method for Time Series". *IEEE Signal Processing Letters, 2018.*

Christopher Xie, Alex Tank, Alec Greaves-Tunnell, Emily Fox. "A Unified Framework for Long Range and Cold Start Forecasting of Seasonal Profiles in Time Series". *arXiv:1710.08473, 2017*

Christopher Xie, Alex Tank, Emily Fox. "A Unified Framework for Missing Data and Cold Start Prediction for Time Series Data". *NIPS Time Series Workshop, 2016.* **Best Oral Presentation**.

Christopher Xie, Teodor Moldovan, Sergey Levine, Sachin Patil, Pieter Abbeel. "Model-based Reinforcement Learning with Parametrized Physical Models and Optimism-Driven Exploration". *Proc. IEEE Int. Conf. on Robotics and Automation - ICRA, 2016.*

Christopher Xie, Jur van den Berg, Sachin Patil, Pieter Abbeel. "Toward Asymptotically Optimal Motion Planning for Kinodynamic Systems using a Two-Point Boundary Value Problem Solver". *Proc. IEEE Int. Conf. on Robotics and Automation - ICRA, 2015.*

Invited Talks A Unified Framework for Missing Data and Cold Start Prediction for Time Series Data. *NIPS Time Series Workshop, 2016.*

Teaching Experience **University of Washington** – Seattle, WA

Teaching Assistant, Machine Learning Coursera Specialization   January - March, 2016
Taught by Emily Fox and Carlos Guestrin.

University of California, Berkeley – Berkeley, CA

Teaching Assistant, CS189: Introduction to Machine Learning   January - May, 2015
Taught by Professor Peter Bartlett and Alyosha Efros.

Teaching Assistant, CS189: Introduction to Machine Learning   January - May, 2014
Taught by Professor Jitendra Malik and Alyosha Efros.

PROFESSIONAL EXPERIENCE	

NVIDIA, Seattle, WA   March - September, 2018
Robotics Research Intern, NVIDIA Robotics Research Lab
Worked on discovering unseen objects in novel environments.

Microsoft, Redmond, WA   June - September, 2016
Research Intern, Consumer Data and Analytics
Worked on Online Learning methods for Forecasting Nonstationary Time Series.

Google, Mountain View, CA   May - August, 2015
Software Engineering Intern, Project Aura
Worked on Google Glass (now known as Project Aura).

eBay, Inc., San Jose, CA   May - August, 2013
Applied Research Intern, Trust Science
Trained neural network and decision tree models to classify fraudulent activity using features extracted from clickstream data only. Optimized them to prevent loss from fraud.

International Computer Science Institute, Berkeley, CA   April 2012 - April 2013
Student Researcher, Artificial Intelligence Group
FrameNet: Developed software to collect crowdsourced data from Amazon Mechanical Turk.
MetaNet: Collaborated with linguists to create a Russian metaphor search using parsed Russian sentences to extract verb-noun relations and clustering algorithms to search for potential new metaphors.

HONORS AND
AWARDS

Best Oral Presentation at NIPS 2016 Time Series Workshop	
National Defense Science and Engineering Graduate (NDSEG) Fellowship	2016
CSE Educators Endowed Fellowship in Computer Science & Engineering (UW)	2015
Draper Laboratory Fellowship (declined)	2015
Eta Kappa Nu Membership	
Student Member of IEEE	

SKILLS

Proficient in Python, Matlab, C++, Java
Skilled at Hadoop, Hadoop Streaming, Hive, bash shell scripting/automation

HOBBIES

- Taekwondo - Received medals from many national and international tournaments. Member of the Alternate Junior National Team in 2010.
- Music - Played keyboard in multiple bands, performed all over the Bay Area.