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

June 2017

Computer Science and Engineering

Master of Science, University of Washington

Computer Science and Engineering

Bachelor of Science, University of California, Berkeley May 2015

Electrical Engineering and Computer Science

Research Graduate Research Assistant September 2015 - Present

EXPERIENCE University of Washington – Seattle, WA

> Undergraduate Research Assistant September 2013 - August 2015

University of California, Berkeley - Berkeley, CA

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

> Christopher Xie, Emily Fox, Zaid Harchaoui. "A Simple Adaptive Tracker with Reminiscences". 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". NeurIPS 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". 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". 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. NeurIPS Time Series Workshop, 2016.

Teaching	
EXPERIENC	F

EXPERIENCE

University of Washington – Seattle, WA

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

University of California, Berkeley – Berkeley, CA

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

January - May, 2015

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

January - May, 2014

Professional

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	2016
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.