# Christopher Xie

Contact Information

E-mail: chrisxie@cs.washington.edu
Website: https://chrisdxie.github.io/

RESEARCH INTERESTS Robotics, Computer Vision, Machine Learning, Artificial Intelligence

EDUCATION

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

Master of Science, University of Washington

Computer Science and Engineering

June 2017

Bachelor of Science, University of California, Berkeley

Electrical Engineering and Computer Science

May 2015

RESEARCH EXPERIENCE Graduate Research Assistant

n 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, Arsalan Mousavian, Dieter Fox. "The Best of Both Modes: Separately Leveraging RGB and Depth for Unseen Object Instance Segmentation". arXiv:1907.13236, 2019.

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". *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 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

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 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 CSE Educators Endowed Fellowship in Computer Science & Engineering (UW) Draper Laboratory Fellowship (declined) Eta Kappa Nu Membership	)	ICRA 2019 RAS Travel Award	2019
CSE Educators Endowed Fellowship in Computer Science & Engineering (UW) Draper Laboratory Fellowship (declined)		Best Oral Presentation at NIPS 2016 Time Series Workshop	2016
Draper Laboratory Fellowship (declined)		National Defense Science and Engineering Graduate (NDSEG) Fellowship	2016
· · · · · · · · · · · · · · · · · · ·		CSE Educators Endowed Fellowship in Computer Science & Engineering (UW)	2015
Eta Kappa Nu Membership		Draper Laboratory Fellowship (declined)	2015
		Eta Kappa Nu Membership	

Student Member of IEEE

#### Advising

Yang Wang (UW undergrad, Sept 2018 - June 2019. next: Master of Science in Information Networking @ CMU)

PROFESSIONAL Paper Reviewing:

ACTIVITIES IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2016

Neural Information Processing Systems (NeurIPS) 2019

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.