

Education

- 2018 – 2023 **Ph.D. in Computer Science**, *Brown University*, Providence, RI.
Advisor: Stefanie A. Tellex
Research: POMDP Planning, Reinforcement Learning, Human-Robot Interaction, Natural Language Processing, Computer Vision
- 2014 – 2017 **B.S. in Electrical Engineering and Computer Sciences**, *University of California, Berkeley*, Berkeley, CA.
Advisor: Ken Goldberg, David Wagner
Research: Robotic Grasping, Usable Security

Selected Papers

- RSS-W 2021 *Leveraging Temporal Structure in Task Specifications for POMDP Planning.*
Xinyu Liu, Eric Rosen, Suchen Zheng, Tyler Edward, George Konidaris, Stefanie Tellex.
Robotics: Science and Systems (RSS) 2021 Workshop Robotics for People 2021.
- 2019 *Specificity-Controlled Video Captioning.*
Xinyu Liu, Ellie Pavlick, Daniel Ritchie, Stefanie Tellex.
Unpublished Manuscript 2019.
- ICRA 2018 *Dex-Net 3.0: Computing Robust Vacuum Suction Grasp Targets in Point Clouds Using a New Analytic Model and Deep Learning.*
Jeffrey Mahler, Matthew Matl, Xinyu Liu, Albert Li, David Gealy, Ken Goldberg.
IEEE International Conference on Robotics and Automation (ICRA) 2018.
- ICISS 2018 *Detecting Phone Theft Using Machine Learning.*
Xinyu Liu, David Wagner, Serge Egelman.
International Conference on Information Science and System (ICISS) 2018.
- RSS 2017 *Dex-Net 2.0: Deep Learning to Plan Robust Grasps with Synthetic Point Clouds and Analytic Grasp Metrics.*
Jeffrey Mahler, Jacky Liang, Sherdil Niyaz, Michael Laskey, Richard Doan, Xinyu Liu, Juan Aparicio Ojea, Ken Goldberg.
Robotics: Science and Systems (RSS) 2017.

Professional Experience

- Summer 2020 **Research Assistant**, *Brown University*, Providence, RI, Advised by Stefanie Tellex, George Konidaris.
- Summer 2019 **Research Assistant**, *Brown University*, Providence, RI, Advised by Stefanie Tellex.
- Summer 2018 **Research Assistant**, *Brown University*, Providence, RI, Advised by Stefanie Tellex.
- 2017 – 2018 **Research Assistant**, *University of California, Berkeley*, Berkeley, CA, Advised by Ken Goldberg, David Wagner.
- Summer 2016 **Research Assistant**, *University of California, Berkeley*, Berkeley, CA, Advised by David Wagner.
- Summer 2015 **Software Engineer**, *NetSuite*, San Mateo, CA.

Skills

- Computing Python, PyTorch, TensorFlow, Java, C++, MATLAB, Unity, Linux, \LaTeX .
- Language English, Chinese.

Relevant Coursework

- Brown University Learning and Sequential Decision Making.
Advanced Probabilistic Methods in Computer Science.
Computational Linguistics.
Computational Semantics.
Computer Vision for Graphics and Interaction.
- UC Berkeley Algorithmic Human-Robot Interaction.
Optimization Models in Engineering.
Introduction to Machine Learning.

Awards and Honors

- Brown University **National Science Foundation Graduate Research Fellowship Program.**
Jack Kent Cooke Graduate Fellowship.
- UC Berkeley **Tau Beta Pi, National Engineering Honor Society**, Fall 2014.
Eta Kappa Nu, National EECS Honor Society, Fall 2014.
Term Honor: Honors to Date, Fall 2014, Spring 2015.



Service

Brown CS **Google exploreCSR** (explorecsr.cs.brown.edu). 2020-2021.
First-year PhD mentor. 2020-2021.