## Jason Xinyu Liu

## Education

2018 - **Brown University** 

Ph.D. in Computer Science Advisor: Stefanie Tellex

2021 Brown University

M.S. in Computer Science Advisor: Stefanie Tellex

2017 University of California, Berkeley

B.S. in Electrical Engineering and Computer Sciences Advisor: Ken Goldberg and David Wagner

## Publications

IROS 2024 Lang2LTL-2: Grounding Spatiotemporal Navigation Commands Using Large Language and Vision-Language Models

**J.X. Liu**, A. Shah, G. Konidaris, S. Tellex, and D. Paulius *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2024*. [website]

- IJCAI 2024 A Survey of Robotic Language Grounding: Tradeoffs between Symbols and Embeddings V. Cohen\*, J.X. Liu\*, R. Mooney\*, S. Tellex\*, D. Watkins\*

  International Joint Conference on Artificial Intelligence (IJCAI) 2024 Survey Track. [PDF]
- ICRA 2024 LTL-Transfer: Skill Transfer for Temporally-Extended Task Specifications

  J.X. Liu\*, A. Shah\*, E. Rosen, M. Jia, G.D. Konidaris, S. Tellex

  IEEE International Conference on Robotics and Automation (ICRA) 2024. [PDF, Website]
- CoRL 2023 Grounding Complex Natural Language Commands for Temporal Tasks in Unseen Environments

**J.X. Liu**\*, Z. Yang\*, I. Idrees, S. Liang, B. Schornstein, S. Tellex, A. Shah Conference on Robot Learning (CoRL) 2023. [PDF, Website, Brown News] AAAI Fall Symposium on Unifying Representations for Robot Application Development (UR-RAD) 2023. Best Paper Finalist.

INTERSPEECH Style-transfer based Speech and Audio-visual Scene Understanding for Robot Action 2023 Sequence Acquisition from Videos

C. Hori, P. Peng, D. Harwath, **J.X. Liu**, K. Ota, S. Jain, R. Corcodel, D. Jha, D. Romeres, J. Le Roux *INTERSPEECH 2023*. [PDF]

- ICRA 2022 **Generalizing to New Domains by Mapping Natural Language to Lifted LTL** E. Hsiung, H. Mehta, J. Chu, **J.X. Liu**, R. Patel, S. Tellex, G. D. Konidaris *IEEE International Conference on Robotics and Automation (ICRA) 2022.* [PDF]
- ACNS 2020 Minority Reports Defense: Defending Against Adversarial Patches
  M. McCoyd, W. Park, S. Chen, N. Shah, R. Roggenkemper, M. Hwang, J.X. Liu, D. Wagner
  Applied Cryptography and Network Security Workshops (ACNS) 2020. [PDF]
- ICRA 2018 Dex-Net 3.0: Computing Robust Vacuum Suction Grasp Targets in Point Clouds Using a New Analytic Model and Deep Learning

J. Mahler, M. Matl, **J.X. Liu**, A. Li, D. Gealy, K. Goldberg *IEEE International Conference on Robotics and Automation (ICRA) 2018.* [PDF, Website]

## ICISS 2018 Detecting Phone Theft Using Machine Learning J.X. Liu, D. Wagner, S. Egelman International Conference on Information Science and System (ICISS) 2018. [PDF] RSS 2017 Dex-Net 2.0: Deep Learning to Plan Robust Grasps with Synthetic Point Clouds and Analytic Grasp Metrics J. Mahler, J. Liang, S. Niyaz, M. Laskey, R. Doan, J.X. Liu, J. A. Ojea, K. Goldberg Robotics: Science and Systems (RSS) 2017. [PDF, Website] **Invited Talks** Oct 2024 UT Austin, Forum for Artificial Intelligence Oct 2024 CU Boulder, CS Colloquium Sep 2024 MIT, Interactive Robotics Group Sep 2024 UT Austin, Center of Autonomy Aug 2024 Arizona State, Logos Robotics Lab Jul 2024 Oxford, CS Department Seminar Oct 2022 Northeast Robotics Colloquium Workshop Organization RSS 2024 Workshop on Task Specification for General-Purpose Intelligent Robots. [Website] **Industry Experience** Summer 2022 Research Intern, Mitsubishi Electric Research Laboratories, Cambridge, MA Summer 2015 Software Engineer, NetSuite, San Mateo, CA Fellowships, Awards and Honors Brown National Science Foundation Graduate Research Fellowship Program, 2018 Jack Kent Cooke Foundation Graduate Scholarship, 2018 UC Berkeley Tau Beta Pi, National Engineering Honor Society, 2014 Eta Kappa Nu, National EECS Honor Society, 2014 Jack Kent Cooke Foundation Undergraduate Transfer Scholarship, 2014 Mentorship 2024 - Lekai Chen (CU Boulder Ph.D.) 2024 - 2025 Ivy He (Brown Ph.D.) 2023 - 2025 Yichen Wei (Brown Master's) 2023 - 2024 Anneke Wernerfelt (Haverford Undergraduate. Now Master's at UPenn) 2023 - 2024 Sofia Juliani (Rutgers Undergraduate) Spring 2021 Shihab Khalfalla (UConn Undergraduate. Now at Microsoft) 2021 - 2022 Eric Hsiung (Brown Master's. Now Ph.D. at UT Austin) 2020 - 2021 Tyler Edwards (UPenn Undergraduate. Now Master's at UPenn) 2020 - 2021 Suchen Zheng (Brown Master's. Now Ph.D. at Yale) **Service** Brown First-year Ph.D. student mentor, 2021-2023 Google exploreCSR (explorecsr.cs.brown.edu), Spring 2021

Review JMLR 2025, CoRL-W 2024, RSS-W 2024, IROS 2024, ICRA 2023, ICRA 2022