

# Kaiyu Zheng

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- Education** **Brown University** Providence, RI  
Ph.D. in COMPUTER SCIENCE. 2018/09 - Present  
Adviser: Stefanie Tellex
- University of Washington** Seattle, WA  
M.S. in COMPUTER SCIENCE. 2017/09 - 2018/06  
B.S. in COMPUTER SCIENCE, Minor in MATHEMATICS. 2013/09 - 2017/06  
cum laude, with honors in Computer Science
- Experience** Research Assistant, **Humans To Robots Lab**, Brown University 2018/09 - Present  
Adviser: Stefanie Tellex
- Visiting Student, **Learning & Intelligent Systems Lab**, MIT CSAIL 2020/06 - 2021/03  
Mentors: Yoonchang Sung, Rohan Chitnis  
Advisers: Leslie Kaelbling, Tomás Lozano-Pérez
- Research Assistant, **Neural Systems Lab**, University of Washington 2016/03 - 2018/06  
Advisers: Andrzej Pronobis, Rajesh P. N. Rao
- Software Engineering Intern, **CME Group Inc.**, Chicago, IL 2015/06 - 2015/09
- Research Assistant, **Movement Control Lab**, University of Washington 2015/04 - 2015/06  
Advisers: Vikash Kumar, Emanuel Todorov
- Web Developer, **UW Information Technology**, Seattle, WA 2014/10 - 2015/06
- Selected Publications** **Kaiyu Zheng**, Yoonchang Sung, George Konidaris, Stefanie Tellex. [Multi-Resolution POMDP Planning for Multi-Object Search in 3D](#). *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2021
- Kaiyu Zheng**, Deniz Bayazit, Rebecca Mathew, Ellie Pavlick, Stefanie Tellex. [Spatial Language Understanding for Object Search in Partially Observed Cityscale Environments](#). *IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*, 2021
- Kaiyu Zheng**. [ROS Navigation Tuning Guide](#). *Robot Operating System (ROS) - The Complete Reference (Volume 6)*, Springer, 2021. (Book chapter)
- Kaiyu Zheng** and Andrzej Pronobis. [From Pixels to Buildings: End-to-end Probabilistic Deep Networks for Large-scale Semantic Mapping](#). *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2019
- Kaiyu Zheng**, Andrzej Pronobis, and Rajesh P. N. Rao. [Learning Graph-Structured Sum-product Networks for Probabilistic Semantic Maps](#). *AAAI Conference on Artificial Intelligence (AAAI)*. 2018.
- Selected Service** Reviewer, RA-L, ICRA, IROS (2019, 2021)  
Organizer, Brown Robotics Group Seminar Series (2021)  
Producer, the *Working Robots* podcast (2019 - 2021)  
Programming teacher, *Asa Messer Elementary School*, Providence, RI (2018)  
Teaching Assistant, CSCI 2951F: *Learning and Sequential Decision Making*, Brown (2021)  
Teaching Assistant, CSE 446: *Machine Learning*, University of Washington (2017, 2018)  
Teaching Assistant, CSE 311: *Foundation of Computing I*, University of Washington (2016,2018)  
Teaching Assistant, CSE 373: *Data Structure and Algorithms*, University of Washington (2017)  
Food Packer, *Food Lifeline*, Seattle, WA (2014)
- Languages** English, Chinese (Mandarin and Cantonese; native), French (beginner)