## Yifan Zhu

# (615) 336-2870 yifan16@illinois.edu

#### **EDUCATION**

University of Illinois at Urbana-Champaign, Urbana-Champaign, IL
Ph.D. in Computer Science expected: Dec. 2022

# Duke University, Durham, NC

Ph.D. in Electrical and Computer Engineering(transferred) Aug. 2017-Aug. 2019

## Vanderbilt University, Nashville, TN

Bachelor of Engineering May 2017 Major: Mechanical Engineering

1st Minor: Mathematics 2nd Minor: Computer Science

# INDUSTRY

### Baidu Robotics & Autonomous-driving Lab, Sunnyvale, CA

**EXPERIENCE** Research Intern May - Dec. 2021

#### **PUBLICATION**

- **Y. Zhu**, A. Smith, and K. Hauser, "Automated Heart and Lung Auscultation in Robotic Physical Examinations," IEEE Robotics and Automation Letters (RA-L) with ICRA 2022 option.
- Q. Lu\*, Y. Zhu\*, and L. Zhang, "Excavation Reinforcement Learning Using Geometric Representation," IEEE Robotics and Automation Letters (RA-L) with ICRA 2022 option.
- Y. Zhu, Z. Pan, and K. Hauser, "Contact-Implicit Trajectory Optimization With Learned Deformable Contacts Using Bilevel Optimization," IEEE International Conference on Robotics and Automation (ICRA) 2021.
- G. Ma, S. Oca, Y. Zhu, P. J. Codd., and D. Buckland, "A Novel Robotic System for Ultrasound-guided Peripheral Vascular Localization," IEEE International Conference on Robotics and Automation (ICRA) 2021.
- Y. Zhu, K. Lu, and K. Hauser, "Semi-Empirical Simulation of Learned Force Response Models for Heterogeneous Elastic Objects," IEEE International Conference on Robotics and Automation (ICRA) 2020.
- Y. Zhu, L. Abdulmajeid, and K. Hauser, "A Data-driven Approach for Fast Simulation of Robot Locomotion on Granular Media," IEEE International Conference on Robotics and Automation (ICRA) 2019.
- Y. Zhu, P. J. Swaney, I. S. Godage, R. Lathrop, and R. J. Webster, "A Disposable Robot for Intracerebral Hemorrhage Removal. Journal of Medical Devices, 2016; 10(2), 020952.

#### EXPERIENCE ANA Avatar XPRIZE

• One of the team leads on teem AVATRINA that has entered the finals, competing for \$10M award.

**TEACHING(TA)** Intelligent Robotics (UIUC)

 $Spring\ 2020$ 

Intro to Robotics and Automation (Duke University)

Fall 2018

Intro to Robotics (Vanderbilt University)

Fall 2015 and Fall 2016

**ACTIVITIES** 

**PROFESSIONAL** Reviewer for: IEEE International Conference on Robotics and Automation (ICRA); IEEE International Conference on Intelligent Robots and Systems (IROS); IEEE Robotics and Automation Letters (RA-L); IEEE Transactions on Robotics (T-RO); IEEE International Conference on Advanced Robotics (ICAR); IEEE Robotics & Automation Magazine (RAM)

LINKS AVATAR XPRIZE team website: https://avatarxprize.web.illinois.edu/