

Yifan Zhu

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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 EXPERIENCE **Baidu Robotics & Autonomous-driving Lab, Sunnyvale, CA**
Research Intern May - Dec. 2021

PUBLICATION Q. Lu, **Y. Zhu**, L. Zhang, "Excavation Reinforcement Learning Using Geometric Representation," Submitted to IEEE Robotics and Automation Letters (RA-L).

Y. Zhu, K. Hauser, "Automated Heart and Lung Auscultation in Robotic Physical Examinations," Submitted to IEEE Robotics and Automation Letters (RA-L).

Y. Zhu, Z. Pan, 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., 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, 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, 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** Sept. 2019 - present

- One of the team leads on team 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*

PROFESSIONAL ACTIVITIES *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/>*