Yifan Zhu

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EDUCATION

University of Illinois at Urbana-Champaign, Urbana-Champaign, IL expected: Dec. 2022

Ph.D. in Computer Science

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, and L. Zhang, "Excavation Reinforcement Learning Using Geometric Representation," Submitted to IEEE Robotics and Automation Letters (RA-L).
- Y. Zhu, A. Smith, and K. Hauser, "Automated Heart and Lung Auscultation in Robotic Physical Examinations," Submitted to IEEE Robotics and Automation Letters (RA-L).
- 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 $\label{thm:cond-guided} \textit{Peripheral Vascular Localization}, "\textit{IEEE International Conference}$ 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 Sept. 2019 - present

• 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/