Hejia Zhang

2673 Menlo Avenue Unit 3 Room E · Los Angeles · CA 90007

hejiazha@usc.edu +1 (213) 477-0490

EDUCATION

University of Southern California *Los Angeles, USA*

M.S. in Computer Science, GPA: 4.0/4.0 *01/2018 – Present*

Zhejiang University *Hangzhou, China*

B.E. in Bioengineering, GPA: 3.63/4.0 *09/2013 – 07/2017*

Honor Second-Class Scholarship for Outstanding Merits, Zhejiang University *2013 – 2014*

Third-Class Scholarship for Outstanding Merits, Zhejiang University *2015 – 2016*

ACADEMIC EXPERIENCE

Robotic Embedded Systems Laboratory (Prof. Gaurav S. Sukhatme)

Graduate Research Assistant, University of Southern California *02/2018 – Present*

- Conducting peer-reviewed research on imitation and reinforcement learning (see publications)
- Designing and developing robot learning environments for Sawyer robot, in simulation and on the real robot
- Developing open-source deep reinforcement learning framework *Garage*[1]
- Supporting diagnosis and repair of hardware problems on RESL's PR2 robot, reached out to research groups from several universities for potential solutions

Institute of Biosystem Automation and Information Technology (Prof. Hui Fang)

Undergraduate Research Assistant, Zhejiang University *02/2016 – 01/2017*

- Developed real-time point cloud data processing software, responsible for GUI, data-processing modules
- Prototyped novel systems for rapidly detecting the ATP content of plants (see patents)

PUBLICATIONS

- Hejia Zhang[2], Eric Heiden[2], Ryan Julian, Zhangpeng He, Joseph J. Lim, and Gaurav S. Sukhatme. **Auto-conditioned Recurrent Mixture Density Networks for Complex Trajectory Generation**. *Submitted to International Conference on Robotics and Automation (ICRA)*, 2019.
- Zhanpeng He, Ryan Julian, Eric Heiden, Hejia Zhang, Stefan Schaal, Joseph J. Lim, Gaurav S. Sukhatme, Karol Hausman. **Zero-Shot Skill Composition and Simulation-to-Real Transfer by Learning Task Representations**. *Submitted to International Conference on Robotics and Automation (ICRA)*, 2019.
- Ryan Julian[2], Eric Heiden[2], Zhangpeng He, Hejia Zhang, Stefan Schaal, Joseph J. Lim, Gaurav S. Sukhatme, Karol Hausman. **Scaling simulation-to-real transfer by learning composable robot skills**. *To be presented at International Symposium on Experimental Robotics (ISER)*, 2018.

PATENTS

- Fang, Hui; Zhang, Hejia; Zhang, Xuzhou; He, Yong. 2017. **Method for rapidly detecting content of ATP of plant leaf.** CN107515211A, filed Dec 26, 2017. Patent Application

[1] https://github.com/rlworkgroup/garage

[2] Equal contribution

PROFESSIONAL EXPERIENCE

Seeta Technology Co., Ltd *Beijing, China*

Software Engineer *01/2017 – 12/2017*

- Developed and maintained face recognition cloud platform which accepts and processes user management, face feature management and face recognition requests from hundreds of different organizations
- Implemented online data annotation platform which allows non-technical users to clean and annotate unlabeled data
- Developed face recognition access control system which has been employed in a lot of schools and companies
- Supervised and managed software development interns

SKILLS

Programming Languages: C/C++ Python Matlab Linux Shell Scripting

Code Version Control: SVN Git

Machine Learning Development Framework: TensorFlow Pytorch

Robotics Development Framework: Robot Operating System (ROS)

Robot Simulator: Gazebo MuJoCo

Computer Vision Libraries: OpenCV Point Cloud Library (PCL)