HUA (AUSTIN) JIANG

1-(510) 260-5816 | huajiang@gatech.edu | https://www.linkedin.com/in/austin-jiang-79bb87b1/

OBJECTIVE

EDUCATION

Georgia Institute of Technology (Georgia Tech), Atlanta, GA

- B. S. IN COMPUTER SCIENCE, GPA: 3.63/4.00 *Jan. 2017 -- Dec 2018 (Exp.)*
- B. S. IN MECHANICAL ENGINEERING, GPA: 3.60/4.00, Highest Honor *May. 2012 -- Dec. 2016*

SKILLS

Programming Languages / Libraries: Python (Excellent), C/C++(Excellent), Java, MySQL, OpenCV
Robotics / Software: Rethink Sawyer, Universal Robots 5, Arduino, MATLAB (Excellent), CAD (Excellent)
OSs / IDEs: ROS, Windows OS, MacOS, Linux OS, Android Studio, Network Protocol, Multi-Threading
Mech. E / Elec. E: Lathe, mill, band saw, and hand tools, soldering and mounting components
Languages: Fluent in Mandarin and English, basic Japanese

WORK EXPERIENCE

Institute for Robotics and Intelligent Machines, Georgia Tech, Atlanta, GA *Aug. 2018 – Present*
ROBOTICS TEACHING ASSISTANT (CS 3630 INTRO TO ROBOTICS AND PERCEPTION)

- Analyzed and debugging student's Python code and make sure their Cozmo robot perform Object Detection/Tracking , path planning, and localization.
- Investigating, evaluating and providing feedback for over 150+ students for their project assignments, while being a full-time student.
- Implementing machine learning algorithm (SVM) for robot to object detection.

The Space Robotics Lab, Tohoku University, Sendai, Japan *May. 2018 –July. 2018*
ROBOTICS SOFTWARE ENGINEER (INTERNSHIP)

- Technology review of the state-of-the-art in climbing robot.
- Review of the state of the art in sampling based planning applied to legged robots.
- Use different algorithm to simulate the path-planning through Python/C++ and ROS for Turtlebot3 in gazebo environment.
- Built the rosbubble robot with laserscan to navigation in the lunar environment (height-map) in V-Rep environment.

Institute for Robotics and Intelligent Machines, Georgia Tech, Atlanta, GA *Dec. 2016 – May. 2018*
COMPUTER VISION RESEARCH ASSISTANT

- Analyzed driving video applying computer vision and machine learning principles through Python/C++ and the Robot Operating System (ROS) for Autonomous Ground Vehicles (AutoRally Project).
- Applied extensive robotics principles to assure critical test parameters (arm moving speed, moving type, variance cutting material, etc.) for Sawyer robots. Configured and operated robots for quantifying the accuracy of manufacturing deburring.

Precision Machining Research Consortium, Georgia Tech, Atlanta, GA *Sept. 2014 – May. 2017*
RESEARCH ASSISTANT

- Self-learned principles of computed tomography, computational reconstruction, and metrological application in the areas of manufacturing and experimental mechanics by studying literatures.
- Developed computational methods with MATLAB for simulating images and identifying geometries using large tomographic imaging data.
- Developed a robust method for quantifying the accuracy of simulated images when analyzed against the real ones.

Mechanical Engineering Dept., Georgia Tech, Atlanta, GA *Sep. 2016 – Dec. 2016*
MACHINE VISION COURSE GROUP PROJECT

- Applied Image processing (image Filter, Smoothing and Feature Detection) to illumination images.
- Designed algorithms to detect meat for meat processing industry, achieving over 90% precision; ranked first in terms of accuracy in the entire class).

OTHER EXPERIENCE

Aerospace Robotics Lab, Tohoku University, Sendai, Japan *July 2017 – Aug. 2017*
VISITING RESEARCHER

- Designed and built Lego robots for pathfinding and collision avoidance purposes using ROS system.
- Worked in a team of 5 to integrate different robotics APIs and coded programs in Python and ROS.
- Connected with external neuron network for facial and object detection and recognition purposes.

AWARDS

- Mechanical Engineering Undergraduate Research Symposium, Air Products, *2017*
- President's Undergraduate Research Awards (PURA Scholarship), Georgia Tech, *2016*