HUA (AUSTIN) JIANG

1-(510) 260-5816 | <u>huajiang@gatech.edu</u> | <u>https://www.linkedin.com/in/austin-jiang-79bb87b1/</u> https://austinjia.github.io/me/project.html (Under construction now, will be ready after 12/25/2018)

OBJECTIVE

EDUCATION

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

• B. S. IN COMPUTER SCIENCE, GPA: 3.63/4.00, Highest Honor

• B. S. IN MECHANICAL ENGINEERING, GPA: 3.60/4.00, Highest Honor

Hong Kong University of Science and Technology, Hong Kong

• MECHANICAL ENGINEERING, STUDY ABROAD

Iowa State University, Ames, IA

• MECHANICAL ENGINEERING, GPA: 3.78/4.00

Jan. 2014 -- May 2014

Jan. 2017 -- Dec, 2018

May. 2014 -- Dec. 2016

Jan. 2012 -- Dec. 2013

SKILLS

Programming Languages / Libraries: C/C++(Excellent), Python, 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

Dorabot (Robotics company in Warehouse Automation), Norcross, GA

ROBOTICS SOFTWARE ENGINEER

Jan. 2019 – Present

Analyzed and integrating robotics manipulator and make sure the arm able to sorting UPS package.

Institute for Robotics and Intelligent Machines, Georgia Tech, Atlanta, GA

Aug. 2018 – Dec. 2018

ROBOTICS TEACHING ASSISTANT (CS 3630 INTRO TO ROBOTICS AND PERCEPTION) [UNDER DR.SETH HUTCHINSON]

- 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) [UNDER DR.KAZUYA YOSHIDA]

- 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 [UNDER DR.JAMES REHG & DR. LARRY SWEET]

- 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 [UNDER DR. CHRISTOPHER SALDANA]

- 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

Tohoku University, Sendai, Japan

July 2017 - Aug. 2017

SUMMER ROBOTICS PROGRAM

- 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.

Center Street Residence Hall, Georgia Tech, Atlanta, GA

Aug. 2014 – Jan. 2015

FINANCE COORDINATOR

- Performed all reimbursement procedures as required by law and managed the organizational spending of around \$5000 annual budget.
- Communicated the financial status in an open and transparent way to the executive board.

Academic Success Center, Iowa State University, Ames, IA

Jan. 2013 – Dec. 2013

LINEAR ALGEBRA TUTOR

- Worked with college students to develop a tutoring plan that fits their individual needs.
- Applied technical communication skills to effectively tutor 20 students.

AWARDS

- Mechanical Engineering Undergraduate Research Symposium, Air Products, 2017
- President's Undergraduate Research Awards (PURA Scholarship), Georgia Tech, 2016
- Dean's List, Georgia Tech, 2014 2015 2016 2017