William Hampton

817-851-8471

whampton99@gmail.com

linkedin.com\whampton99

Experience

THINC Laboratory

Research Assistant October 2018 - Current University of Michigan

Developed ROS control code for experiments using the SAWYER robot. Maintained and extended a drone control simulator utilizing Tobii Pro glasses for gaze tracking.

Honda R&D Detroit

Autonomous Vehicles Intern May-September, 2018 Southfield, Detroit

Developed ROS packages for sensor processing of CAN based vehicle sensors, demonstrated in-vehicle prototype of real-time object tracking and state detection in ROS using developed packages.

Laboratory4Progress

Robotics Research Intern June-August, 2017 University of Michigan

Led a team developing a four wheel drive robot with an onboard 6 DOF arm. Designed and implemented the wiring harness and power system for the arm, and developed ROS controllers for the robot base and arm.

Textron Systems

Electrical Engineer Intern June-August, 2016 Baltimore, MD

Worked on a prototype FPGA radar signal simulator. Developed VHDL logic for communicating between the board and a SPI memory chip, a DAC interface, and a DDR₃ RAM card. Tested and analyzed several prototype boards.

Education

University of Michigan Masters of Robotics Started Fall 2018 Estimated Graduation Spring 2020 University of Alabama B.S. Computer Engineering, B.S. Computer Science Class of 2017 Graduated Magna Cum Laude Honors College

Skills

Languages

Python, C/C++, C#, VHDL, Java, Lisp

Electronics

Embedded Systems Design, PCB Design, Arduino, Beaglebone, and Raspberry Pi experience

Programs

ROS, Ubuntu Server, Blender, Autodesk Inventor, OrCAD, DipTrace

Classes

Robotics

Robotics Systems Laboratory, Artificial Intelligence, Self Driving Cars, Automatic Control, Embedded Systems

Computer Science

Aerospace Information Systems, Software Reverse Engineering, Programming Languages

Electrical Engineering

VSLI for Machine Learning, Digital Systems Design, Electrical Circuits, Programmable Logic Controllers

Math

Linear Control Systems, Mathematics for Robotics,, Theory of Probability, Linear Algebra