

Thomas Keady

thomaskeady.github.io

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Education

Johns Hopkins University

Bachelor of Science in Electrical Engineering
Bachelor of Science in Computer Engineering
Major GPA: 3.50/4.0

Baltimore, MD
Expected May 2018
Expected May 2018

South Side High School

Regents Diploma with Advanced Designation, GPA: 101.4/100
International Baccalaureate Diploma, 41/45 points
International Baccalaureate Extra Certificate, Physics Higher Level

Rockville Centre, NY
May 2014
May 2014
May 2014

Technical Skills

Electrical Engineering: serial protocol, EAGLE, soldering, sensor calibration, TTL, rapid prototyping
Software Engineering: Java, C++, multithreading, interrupts, C, JNI, Python, Assembly, Perl
Operating Systems: Mac OS, Windows 7, 8, 10, Linux (including virtual machines)
Currently learning: CNC, signal processing, power electronics

Work Experience

Applied Physics Laboratory

Advanced Application Scholars Program Intern

Laurel, MD
May. 2016 - Aug. 2016

- Wrote C++ driver class for serial communication with wireless sensing platform
- Created Java Native Interface for driver integration with existing Java projects
- Modified solar-powered battery charger circuit to change output voltage of buck-boost converter
- Researched specifications and functionality of inertial measurement units and electronic speed controllers

Laboratory for Computational Sensing and Robotics

Student Researcher

Baltimore, MD
Feb. 2016 - present

- Designed electrical systems for 5 degree of freedom Preoperative Positioning System for a new surgical robot
- Constructed power distribution circuits with emergency stop for motors and hydraulics
- Constructed control circuits including position sensing encoders with readout on a touchscreen display
- Designed and coded logic and user interface for simultaneous control of actuators via touchscreen and joystick

Fusiform Medical Devices

Design Engineer

Baltimore, MD
May 2015 - present

- Designed portable data collection platform to record forces experienced by lower limb orthotic devices
- Constructed platform for use in IRB study and calibrated sensors to output real force values
- Learning to program CNC milling machines for automated manufacturing
- Team selected to receive support from Accelerate Baltimore and the Social Innovation Lab

Bloomberg School of Public Health

Information Technology Assistant

Baltimore, MD
Mar. 2015 - Feb. 2016

- Resolve technology and hardware issues for medical researchers and administrative staff
- Develop code to maintain and support data collection and database servers
- Use APIs to build survey tools for Android devices