Thomas Keady

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Education

Johns Hopkins University   Baltimore, MD
Bachelor of Science in Electrical Engineering   Expected May 2018
Bachelor of Science in Computer Engineering   Expected May 2018
Major GPA: 3.52/4.0

South Side High School   Rockville Centre, NY
Regents Diploma with Advanced Designation, GPA: 101.4/100   May 2014
International Baccalaureate Diploma, 41/45 points   May 2014
International Baccalaureate Extra Certificate, Physics Higher Level   May 2014

Technical Skills

Electrical Engineering: EAGLE, circuit analysis, TTL, sensor calibration, soldering, rapid prototyping
Computer Languages: Java, Python, C, C++, Assembly, Perl, Javascript
Operating Systems: Mac OS, Windows 7, 8, 10, Linux (including virtual machines)
APIs: XLSForm, Textit, Android API
Currently learning: power electronics, signal processing, MATLAB

Work Experience

Biomedical Engineering Design Team   Baltimore, MD
Engineer   Oct. 2015 - present
  - Evaluated microcontroller options for handheld low-cost tocodynamometer and identified ideal candidate
  - Analyzing output of uterine contraction detection algorithm to improve accuracy
  - Proposed idea that decreasing sensor resolution could improve time and memory efficiency while increasing accuracy, currently testing this approach

JHU Rotobics Club   Baltimore, MD
Lead Electrical Engineer   Aug. 2015 - present
  - Added hardware PWM capabilities to Raspberry Pi for auto-targeting ball launcher project
  - Supporting construction of optical shaft encoder for increased aiming accuracy
  - Designing autonomous maze-solving micromouse with optimal speed, weight and footprint
  - Participating in outreach program introducing disadvantaged Baltimore high schoolers to computer science and robotics with Arduino

Fusiform Medical Devices   Baltimore, MD
Engineer, Researcher   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 production of modular orthotics
  - Team selected to receive support from Accelerate Baltimore and the Social Innovation Lab

Bloomberg School of Public Health   Baltimore, MD
Information Technology Assistant   Mar. 2015 - present
  - Use APIs to build survey tools for Android devices
  - Develop code to maintain and support data collection and database servers
  - Resolve technology and hardware issues for medical researchers and administrative staff

Memorial Sloan-Kettering Cancer Center   New York, NY
Student Intern   June - Sept. 2012 & 2013
  - Performed graduate-level bioinformatics research full time over two summers
  - Developed and applied computer scripts to apply statistical data analyses, searching for associations between genetic variations and cancer
  - First exposure to computer science, learned scripting and general computer science techniques
  - Recognized as Siemens National Semifinalist in 2012 for research