Keaton Armentrout

EDUCATION

Duke University

December 2016 • Durham, NC M.S. in Biomedical Engineering GPA: 3.83/4.00

Washington University in St. Louis

May 2015 • St. Louis, MO B.A. in Neuroscience Minor in Music Alpha Delta Phi, Eliot Chapter College Honors, Dean's List GPA: 3.60/4.00

University College London

January – June 2014 • London, UK Affiliate Student, Biosciences Division Grade: Upper Second (2:1)

SKILLS

Development

Python MATLAB Java HTML / CSS Flask Arduino / Photon

Lab Techniques

Oscilloscope and multimeter use Breadboard / circuit construction

COURSEWORK / PROJECTS

THINC 2016 Hackathon: Third Place

+ Built a web application using Flask and Node.js to reduce emergency room overcrowding

Introduction to Medical Instrumentation

+ Designed and built an Arduinocontrolled, Fitbit-like activity monitor

Invention to Application

 Developed a business plan for a medical software startup lead by Duke hospital faculty

Signal Processing & Applied Mathematics

+ Created a sign language alphabet to text transcription program in MATLAB

Human-Robot Interaction

+ Wrote MATLAB software interpreting EEG signals to control an external device

EXPERIENCE

TECHSTARS BOSTON. Data Science & Tech Associate

January 2017 - Present - Boston, MA

+ Performing data analytics and software development projects for 13 early-stage startups in the Techstars Boston class

MIGUEL NICOLELIS NEURAL ENGINEERING LAB. Research Assistant September 2015 – December 2016 • Durham, NC

- + Analyzed kinematic and neural data in a study of locomotion
- + Created predictive models of leg motion from neural activity using MATLAB for potential application to brain-machine interfaces

WARREN GRILL NEURAL ENGINEERING LAB. Research Assistant March 2016 - September 2016 - Durham, NC

- + Developed a suite of tools in Python for academic article reference, and organization
- + Built front- and back-end components using SQLAlchemy and PyQt5 for database and GUI design
- + Integrated functionality of existing article providers and managers via API calls

DUKE NEUROSCIENCE CAMP. Instructor

July 2016 • Durham, NC

- + Prepared lectures and led discussions on neuroscience, neuroethics, and philosophy
- + Mentored and organized science-based activities for 28 high school students

WASHU C-TRAIN RESEARCH GROUP. Research Assistant

June - August 2015 • St. Louis, MO

- + Wrote custom plugins in Java for ImageJ software to automate ultrasound image processing
- + Prepared and organized organic tissue samples

THOROUGHMAN BIOMEDICAL ENGINEERING LAB. Research Assistant September 2014 – January 2015 • St. Louis, MO

- + Investigated the effect of observation of tasks on motor learning through controlled human studies
- + Analyzed motor manipulation data from human reaching tasks using MATLAB
- + Collaborated with Principal Investigator and graduate students as sole undergraduate researcher

WUSAUCE SALSA DANCE TEAM. Training Chair, Choreographer

September 2013 - May 2015 - St. Louis, MO

- + Created and led weekly public lessons to Washington University students
- + Trained new team members in multiple dance styles for public performance and international competition
- + Choreographed and taught new team routines