

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
+ Numpy, Pandas, Scikit, SQLAlchemy, PyQt5, Requests, Unittest, Nosetests
Web Development
+ HTML, CSS, Flask, React.js, Javascript
MATLAB
Java
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 React.js to reduce emergency room overcrowding

Introduction to Medical Instrumentation

+ Designed and built an Arduino-controlled, Fitbit-like activity monitor

Invention to Application

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

Signal Processing & Applied Mathematics

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

Personal Website

+ Built personal static site using the Hugo framework and custom HTML/CSS

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
- + Developed a webscraping program in Python using Requests and Selenium for sales lead discovery

MIGUEL NICOLELIS NEURAL ENGINEERING LAB. *Research Assistant*

September 2015 – December 2016 • Durham, NC

- + Analyzed kinematic and neural data in a study of locomotion
- + Wrote MATLAB scripts to determine phase of gait and fit multilinear regression models of neural firing rate
- + Created predictive models of leg motion from cortical neuron activity in 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 via API calls
- + Tested python code and practiced test-driven development with Nosetests

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

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