

Keaton Armentrout

keaton.armentrout@duke.edu
ksarmentrout.com

EDUCATION

Duke University

Expected: December 2016 / Durham, NC
M.S. in Biomedical Engineering
GPA: 3.43/4.00

Washington University in St. Louis

May 2015 / St. Louis, MO
B.A. in Neuroscience (College Honors)
Minor in Music
Dean's List, GPA: 3.60/4.00

University College London

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

SKILLS

Development

MATLAB / Python / Java
HTML / CSS
Git
Arduino
ImageJ

Lab Techniques

Intra- and extracellular single-unit
neuron recordings
Oscilloscope and multimeter use
Breadboard / circuit construction

RELEVANT COURSEWORK

Signal Processing & Applied Mathematics
Biophysics of Neuroscience Tools
Introduction to Medical Instrumentation
Algorithms and Data Structures
Human-Robot Interaction
Invention to Application
Control of Movement
Laboratory of Neurophysiology
Physics of the Brain
Visual Neuroscience

EXPERIENCE

Warren Grill Neural Engineering Lab. Research Assistant

March 2016 - Present / Durham, NC

- Developing Python application to communicate with multiple APIs and extend functionality of Mendeley journal article referencing software

Miguel Nicolelis Neural Engineering Lab. Research Assistant

September 2015 - Present / Durham, NC

- Analyzing kinematic and neural data in a study of locomotion
- Vivarium certified for handling non-human primates.

WU C-TRAIN Research Group. Research Assistant

June 2015 – August 2015 / St. Louis, MO

- Wrote custom plugins in Java for ImageJ software to automate ultrasound image processing.
- Prepared and organized organic tissue samples.
- Presented research results in a group setting.

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.

WU Department of Biology. Teaching Assistant

January – May 2013 / St. Louis, MO

- Supervised two sections of 30-35 undergraduate students in a Phage Genome Annotation program.
- Advised students on genome analysis techniques and underlying biological concepts.

WU Chemistry Library. Library Assistant

September 2013 – May 2015 / St. Louis, MO

- Staffed library main desk, handling student inquiries and book orders for on- and off-campus distribution.
- Maintained organization and cleanliness of general library facilities.

WUSauce Salsa Dance Team. Executive Board – Training Chair

September 2013 – May 2015 / St. Louis, MO

- Taught weekly public lessons to Washington University students.
- Trained new team members in multiple dance styles for public performance.
- Choreographed and taught new team routines.