

# Keaton Armentrout

keaton.armentrout@duke.edu  
ksarmentrout.github.io

## 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 / Java / C  
HTML / CSS  
Git  
Arduino  
ImageJ

### Lab Techniques

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

## RELEVANT COURSEWORK

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

## EXPERIENCE

### Nicolelis Neural Engineering Lab. Research Assistant

September 2015 - Present / Durham, NC

- Assisting in neural data collection for bimanual studies of motor control.
- Vivarium certified for handling non-human primates.

### WU C-TRAIN Research Group. Research Assistant

June 2015 – August 2015 / St. Louis, MO

- Wrote custom plugins 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.