

# CHING FANG

878 Bridgeway Circle, El Sobrante, CA 94803  
510.325.8925  
chingfang17@berkeley.edu

## EDUCATION

---

University of California Berkeley

Expected Graduation: May 2018

*B.A. in Molecular & Cell Biology, Neurobiology*

*B.A. in Computer Science*

## EXPERIENCE

---

Dan Feldman Lab | Helen Wills Neuroscience Institute

*Fall 2014-present*

Research Assistant

- Theoretical Neuroscience: Testing and implementing different neural spike-sorting algorithms to maximize signal detection and to effectively process signals. Challenges include finding efficient ways to analyze massive amounts of neural data.
- Behavioral: Previously worked in the SFARI behavioral project, measuring sensitivity of sensorimotor cortex in autism-model mice.

UC Berkeley CS61BL: Data Structures

*Fall 2016-present*

Undergraduate Student Instructor

- Taught and led discussion and lab sections. Developed discussion worksheets and labs for the course. Course topics included Java, runtime analysis, and data structures.

Anne Collins Cognitive and Computational Neuro. Lab

*Spring 2015-present*

Research Assistant

- Developed front-end and back-end aspects of a behavioral experiment application to test multi-dimensional learning. Used Mechanical Turk platform and hosted on OpenShift.

FemTech Make: Robotics

*Spring 2016-present*

- Worked on building an aquatic ROV with the goal of finding leaks in pipes. Most parts were designed and made through 3D-printing or laser-cutting.

## SKILLS AND ATTRIBUTES

---

**Languages (in order of comfort)**: Java, Python, C, Matlab, SQL, Javascript, HTML/CSS, Lisp

**Frameworks/Tools**: Spark, OpenMP, Hadoop, Mechanical Turk, PsiTurk, TensorFlow

**Wet Lab**: Dissection (Cranial and Full-Body), TLC, Gel Electrophoresis, Spectrophotometry, bacteria isolation, complementation, microtome, histology (flattened cortex)

**Activities**: Cal Climbing, *Words of the Watershed* journal (staff)

## RELEVANT COURSEWORK

---

Organic Chemistry	Biochemistry	Biotechnology
Physics	Physiology/Anatomy	Molecular Neurobiology
Data Structures	Machine Structures	Linear Algebra
Discrete Math/Probability	Artificial Intelligence	

## PROJECTS

---

Available at [chingf.github.io](http://chingf.github.io)