

Research Experience

USC Center for Neural Engineering Los Angeles, CA December 2018 — Present
Memory Decoding Technician

- Integrated **LFP signals** into the lab's **Memory Decoding (MD) machine learning model** for the prediction of memory contents given raw data from invasive hippocampal prostheses.

Contact: Dong Song — dsong@usc.edu

Hires Lab Los Angeles, CA August 2017 — Present
Undergraduate Data Analyst

- Managing the lab's **machine learning pipeline** for the curation of high-speed videography data.
- Designed and assembled **novel experimental rigs** for object discrimination tasks.
- Conducted **surgery** on mice to prepare for head-fixed discrimination experiments.
- Manually curated high-speed videography data from tactile discrimination experiments.

Contact: Andrew Hires — shires@usc.edu

PUBLICATIONS

Enhancing Biomimetic Model Estimation with Parallel Computing (forthcoming)

Xiwei She, Brian Robinson, **Garrett Flynn**, Dong Song, Theodore W. Berger

Automatic Curation of Mouse Whisker Contacts using Convolutional Neural Networks (forthcoming)

Jonathan Sy, **Garrett Flynn**, Samuel Andrew Hires

FUNDING

USC Provost's First Generation Undergraduate Research Fellowship (2018/2019)

Consecutively awarded \$3000 for research in Hires Lab and Song Lab.

Education

Computational Neuroscience (B.S) **The University of Southern California** **August 2017 — December 2020**
Biomedical Engineering Track Los Angeles, CA GPA: 3.82

PROGRAMS

USC Honors in Multimedia Scholarship (2017-2020)

A series of rigorous workshops on multimedia authoring that culminates in a senior capstone.

Bridge Undergraduate Science Program (2019)

A summer research program that promotes interdisciplinary collaboration to achieve radical progress in improving the human condition.

USC Resident Honors Program (2017)

A highly selective program that allows high school juniors to enter college a year early.

Skills

PROGRAMMING

MATLAB

Arduino

Python

Processing

Tensorflow

Keras

OTHER

Adobe Illustrator

Academic and Creative Writing