

## Research Experience

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

- Spearheading a series of multimedia projects on BMI ethics
- Developed a MATLAB pipeline for the decoding of memory contents from local field potentials recorded with intracortical hippocampal electrodes at the USC Keck School of Medicine.

**Contact:** Dong Song — dsong@usc.edu

**Hires Lab** Los Angeles, CA August 2017 — May 2019  
**Undergraduate Researcher**

- Managed 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

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**Computational Neuroscience (B.S)** **The University of Southern California** **August 2017 — December 2020**  
Biomedical Engineering Track Los Angeles, CA GPA: 3.87

## 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

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### PROGRAMMING

**MATLAB**

**Arduino**

Python

Processing

Tensorflow

Keras

### OTHER

Adobe Illustrator

Academic and Creative Writing