

## Contact

[www.linkedin.com/in/guanhuashu](https://www.linkedin.com/in/guanhuashu)  
(LinkedIn)

## Top Skills

Python  
Machine Learning  
Public Speaking

## Languages

Chinese Mandarin (Native or Bilingual)  
English (Native or Bilingual)  
Chinese Cantonese (Limited Working)

## Certifications

Introduction to SQL  
Introduction to Bioconductor in R  
Extreme Gradient Boosting with XGBoost  
Joining Data in SQL  
JavaScript Basics

## Honors-Awards

The Carol Becker McGaugh Award  
Harvard Chan Central Grant

## Publications

Ocular Manifestations of Chordin-like 1 Knockout Mice  
Aging mice show impaired memory updating in the novel OUL updating paradigm  
Epigenetic regulation of the circadian gene *Per1* contributes to age-related changes in hippocampal memory  
HDAC3-mediated repression of the *Nr4a* family contributes to age-related impairments in long-term memory  
Deleting HDAC3 rescues long-term memory impairments induced by disruption of the neuron-specific

# Guanhua S.

Machine Learning Engineer at PrognomiQ  
San Francisco Bay Area

## Experience

PrognomiQ Inc  
Machine Learning Engineer  
January 2023 - Present (4 months)  
San Mateo, California, United States

Harvard T.H. Chan School of Public Health  
Graduate Student Researcher  
October 2021 - December 2022 (1 year 3 months)  
Boston, Massachusetts, United States

Work in Dr. Andrew Beam's Lab and apply DL on medical video data

Meta  
Research Data Scientist Intern  
May 2022 - August 2022 (4 months)  
Cambridge, Massachusetts, United States

Infrastructure network prediction on Facebook video service

Harvard John A. Paulson School of Engineering and Applied Sciences  
Teaching Fellow  
January 2022 - August 2022 (8 months)  
CS109b - Advanced Data Science (2022 Spring)  
CS109a - Introduction to Data Science (2022 Fall)

Mayo Clinic  
Data Science Intern  
June 2021 - August 2021 (3 months)  
Rochester, Minnesota, United States

I worked with the AI development team at the Center for Digital Health and developed a full-stack NLP AI application to review patients outside medical records. Specifically, I leveraged Google Cloud APIs, Vue JS, Flask, Docker, MongoDB, and PySpark to design the pipeline. This internship also includes presenting tech demo and project progress to stakeholders and the team on

weekly basis. Beyond, this application is on a transition state to be placed into clinical practice.

## Boston Children's Hospital

Research Assistant and Lab Manager

July 2018 - April 2020 (1 year 10 months)

Greater Boston Area

I worked in Dr. Chinfei Chen's laboratory, affiliated with Boston Children's Hospital to study system neuroscience. Besides helping maintain and manage the lab, I mostly explored building computational tools for image analysis in the field of vision. I developed two major pipelines to segment certain protein of interests from brain section images, as well as to recapitulate the retina ganglion cells' terminal spatial distribution in the brain over postnatal development in mice.

## UC Irvine

Junior Specialist

December 2017 - June 2018 (7 months)

United States

I worked in Dr. Marcelo Wood's laboratory at UC, Irvine, co-mentored by a post-doc fellow, Dr. Janine Kwapis (now, a faculty member at Penn State). Specifically, I studied the interaction between two epigenetic mechanisms, histone deacetylation and chromatin remodeling in the field of learning and memory. By applying and integrating various molecular and behavioral techniques, we were making the effort to articulate the memory-pertinent function for different epigenetic marker genes.

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## Education

### Harvard University

Master of Science - MS, Computational Biology · (2020 - 2022)

### UC Irvine

Bachelor of Science - BS, Neurobiology · (2014 - 2017)

### Massachusetts Institute of Technology

Cross Registration · (January 2022 - May 2022)