

In-silico **scientist** on the hunt for more **knowledge**. Natural **leader** and **collaborator** looking to bridge the fields of **bioinformatics**, **neuroscience**, and **computer science** to better understand **genetic diseases**.

Education

University of California, San Diego

Computer Science spec. AI + Bioinformatics (M.S.)
4.0 GPA

Computer Science spec. Bioinformatics (B.S.)
3.6 GPA

Relevant Coursework

- Brain-Computer Interfaces
- Molecular Sequence Analysis
- AI Algorithms
- Advanced Bioinformatics Lab
- Biological Databases
- Independent Study (Medicine)
- Statistical Natural Language Processing
- Neural Language Models

Research

University of California, San Diego

Gymrek Lab (2022–Present), Graduate Researcher

Used a diverse library of tools to characterize short tandem repeats (STRs) in humans and model organisms.

Pevzner Lab (2021–2022), Editor

Developed novel code base and datasets for 4th edition of *Bioinformatics Algorithms: An Active Learning Approach*

J. Craig Venter Institute, Infectious Diseases and Genomic Medicine

Undergraduate Fellow (2019–Present)

Investigating the biological basis for chronic inflammatory conditions, predominantly through proteomics.

Highlighted Skills

- High-throughput algorithm design
- NGS analysis
- Machine Learning Algorithms
- Natural Language Processing
- Database architecture
- Integration of multi-omic data sources
- Web Mining
- Python, C++, Java, SQL, CQL, C, R

Industry

Avail Bio

Consultant, Bioinformatics, SWE, and Data Science (2021–Present)

Helped drive development for novel antibody discovery platform. Roles included database architecture, DevOps engineering, multi-omic pipeline analysis, and implementation of graph machine learning algorithms to improve patient outcomes.

Amazon

Data Science + QA Intern (2018, summer)

Tested new products launched to market and applied naive clustering and regression algorithms to isolate potential targets for sales team.

Ring

Software Engineering Intern, Data Science Intern (2016–2017, summers)

Automated and streamlined community-level sales.

Extracurriculars

Neurotech at UCSD

Graduate Advisor (2022–Present)

President (2021–2022)

Community and Design Chair (2020–2021)

Project Lead (2020–2021)

ACM Cyber

Founding Board Member (2018–2019)

Undergraduate Bioinformatics Club

Neuroscience Lead (2019–2020)

Linear-Time Pattern Matching

Publications

The impact of oral-gut inflammation in cerebral palsy. *Frontiers in Immunology*, 2021.

Inflammatory networks linking oral microbiome with systemic health and disease. *Journal of Dental Research*, 2020.

Impaired host response and the presence of *Acinetobacter baumannii* in the serum microbiome of type-II diabetic patients. *IScience (Cell Press)*, 2021.