Sofia Theodoras

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I'm a motivated and driven student at UC Berkeley, interested in computational biology and bioinformatics.

University of California, Berkeley – GPA: 3.65 **Aug. 2020 – Present**

B.A. in Molecular and Cell Biology (Immunology Emphasis), and Computer Science Expected May 2024.

Languages	*Python, Java, JavaScript, C, React, HTML, CSS, AWS, SQL, R, GoLang*	*English, Swedish*
Coursework	*CS186 – Database Systems, Data 100 – Principles of Data Science, CS188 – Intro to AI*	
Current Websites 2023	*Startup Competition (HTML/CSS): https://sofiathebass.github.io/SurMice/* *Web Developer and Current President of TMSCA (HTML/CSS): https://tmsca.berkeley.edu* *UC Berkeley Stem Cell Center Webmaster (Wordpress): https://stemcellcenter.berkeley.edu* *Conboy Lab Webmaster (Wordpress): https://conboylab.berkeley.edu* *Personal Website (React): https://sofiathebass.github.io/chicken-nuggets/*	

DEVELOPER EXPERIENCE

Molecular Screening Intern – Upside Foods **May 2023 – Aug. 2023**

- My work focused on optimization of the R&D cloning process by increasing throughput and reducing variability within various steps of the pipeline.
- Worked on building and optimizing scripts on liquid handler automation equipment (C#, JavaScript) as well as a React UI for a new walkaway system.
- Ran large scale analysis on R&D data to find trends and confidence intervals within their instruments/assays, using over 100k datapoints.

Software Engineering Intern – Clearpol **Jan. 2023 – Mar. 2023**

- Extensive Data analysis and visualization on User Data Analytics for eventual Targeted Marketing, as well as sourcing/building a database of potential customers.
- Quality control for their website, experience probing in depth for UI/UX errors and a cleaner design format

Developer, Plextech **Jan. 2021 – Jan. 2022**

- Completing a neural network driven problem determining the optimal locations for positive human-squirrel interactions within New York city.
- Working with Tassel Software to create an application that can hold their data and communications within their prison to community college program.

TEACHING EXPERIENCE

Coursestaff for CS61A - The Structure and Interpretation of Computer Programs **Aug. 2022 – Dec. 2022**

- Teaching a tutoring section for 61A.
- Running office hours and project parties along with other course staff members.
- Creating getting started and solution videos for 1700 students.

CS88 (Computational Structures in Data Science) CSM Senior Mentor **Aug. 2021 – Dec. 2022**

- Junior/Associate Mentor from August 2021 to August 2022
- Tutoring several sections of students in CS88, an intro computer science course

PROJECTS

Undergraduate Lab at Berkeley – Computational Biology **Jan. 2021 – June 2022**

- Using evolutionary data to create a computational model for a hypoallergenic version of peanut allergens that doesn't affect protein function, specifically focusing on Ara h 2, 6, and 7.
- Findings presented at the BioE Research Symposium (May 1, 2021), and the ULAB Symposium (May 4, 2021)
- 2022 - Mentored students studying cows as model organisms for height

RESEARCH

Undergraduate Researcher, Conboy Lab **May 2022 - Present**

- Researching and planning my own project on how human serum/specific proteins in human serum affect aging in Neural Progenitor Cells; experience using flow cytometer, Western Blots, IPs, cell culture/differentiation.