Samarth Jajoo (web: sam.jajoo.fun, twitter: @jajoosam, email: jajoosam@berkeley.edu)

University of California, Berkeley, 2021-2025

Bachelor of arts, computer science

Coursework includes: Computer Architecture, Real Analysis, Linear Algebra, Discrete Mathematics and Probability Theory, Cognitive Neuroscience, Genetics, Genomics, and Cell Biology, Biophysical Chemistry + Statistical Mechanics, The Structure and Interpretation of Computer Programs, Seminars in Bioprocess Engineering + Computational Biology, Data Structures, Therapeutics Discovery and Development, Concepts of Probability, Introduction to Biomedicine for Engineers, Calculus, Introduction to Cognitive Science, Foundations of Data Science

2023 — sam.jajoo.fun/notes/gap

PopVax - Software engineering and Protein design intern

Designed and optimized antigen candidates for a broadly neutralizing pan-sarbecovirus mRNA vaccine. Wrote code to use AF2 to design compact multimer displays while also preventing clashes: this method served as the main start of the protein engineering pipeline at PopVax. Also built a web app that could organize all of the data generated at PopVax in a sensible way — everything was backlinked, and you could create views of all these different entities to see what's happening in the company.

Prosper Robotics — Software engineering intern

Wrote code to make Prosper's teleoperated robot go faster. Rewrote the inverse kinematics to search more diverse solutions in the same timespan, approximate and interpolate towards solutions, and build UI to guide teleoperators towards the right solutions. Also worked on the interface in the VR app to optimize for speed and motor control to minimize vibrations.

2022

Riff - Personal project

Worked on building a personal tutor with large language models. My favorite part about college has been going to office hours and just riffing on ideas with professors/grad students. I thought it'd be cool for everyone to have the opportunity to get something like that. Used the best available language model at the time (GPT-3 instruct), and set up a workflow to fetch information from the web based on the chat content and augment the model with this information for added accuracy.

2021

Read.gift - Personal project

Ran a service to let people gift books to each other, as an alternative to patreon. Went semi-viral on twitter, ended up shipping 250 books across the world. Built out the entire service in the span of one week. Spoke at Stripe's 2019 annual all hands in San Francisco about the story of how I built it.

2020

ZipSchool — Software engineering intern

First hire at Zip, a platform for homeschoolers to source teaching resources. Worked closely with the founder to develop the company; Helped pivot the startup to focus on creating an online after-school. Work included software engineering, design, growth, and hiring teachers for the school: wrote lots of software for real-time interaction in live classes.

Deta — Software engineering intern

Organized an online code hackathon, and mentored participants to develop prototypes for their passion projects. Also worked as a software engineer to create a visual, spread-sheet like interface for Deta's noSQL database product.

2019

Replit — Software engineering intern

Prototyped a lot of features: a noSQL database attached to every replit project, an analytics dashboard for every repl, a new structure for the home page, a way to link root domains. Very little of what I made got shipped during my internship, but it served as a starting point — replit shipped all of these features to production in the next few years.

Other stuff

- Active member in <u>Machine Learning @ Berkeley</u>
- Co-organizing the <u>BioML seminar series</u> in Berkeley
- Won an Emergent Ventures grant for \$30k to support work across various projects
- I ran one of India's first hack clubs in my school, and designed workshops for the global community
- Interact Fellow, Accel Scholar