MOHAK JAIN

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EDUCATION

University of California, Berkeley Expected Graduation: May 2022

B.S.E. Electrical Engineering & Computer Science (EECS) & B.S.E. Bioengineering GPA: 3.8

Bioengineering Coursework: Organic Chemistry, Biochemistry, Bioethics, Cell Engineering, Synthetic Biology

Computer Science Coursework: Data Structures, Computer Architecture, Artificial Intelligence, Algorithms + Intractable Problems, Computer Graphics. Machine Learning for Computational Bio.

EXPERIENCE

Software Engineering Intern at Datavant (Summer 2021)

Datavant is a Series B startup dedicated to connecting data across healthcare institutions for clinical studies while protecting patient privacy.

Undergraduate Researcher at Doudna Lab (Jan. 2019 – June 2021)

Nobel Laureate Prof. Jennifer Doudna's lab at UC Berkeley is known for discovering editing tool CRISPR/Cas9 and RNA biology research.

- Processed NGS data to identify novel gene editing tools from viral CRISPRs using Python, TensorFlow, & R.
- Previously worked on understanding structure & function of protein RT-Cas1 involved in CRISPR RNA acquisition.
- Performed biochemistry techniques including cloning, culturing, protein purification, etc.

Principal at Phoenix Consulting Group (Feb. 2020 - Present)

UC Berkeley-based consulting group focused on the healthcare space.

- Leading development of a health-tech accelerator for early-stage startups.
- Consulted and presented research for companies in next-generation sequencing, COVID-19 diagnostics, and more.

Undergraduate Researcher at Goodarzi Lab (Sept. 2020 – May 2021)

The Goodarzi Lab at UCSF uses computational frameworks like machine learning to research genomics and cancer.

- Predicting 3D genome architecture from ATAC-seq data using graph convolutional neural networks and deep learning.

Genome Engineering Intern at enEvolv, Inc. (Jun. – Aug. 2019)

Synthetic biology startup spun out of George Church's lab at Harvard University. Acquired by Zymergen, March 2020

- Improved efficiency of Multiplex Automated Genome Engineering in *S. cerevisiae* (yeast) to commercially viable rates.
- Wrote interim report to the National Science Foundation on the project.
- Programmed scripts using Python and bioinformatics libraries for experimental design & data analysis.
- Performed yeast culturing, Benchling, Python scripting, library building, etc.

PROJECTS

***Ready, Set, Health!* (Jan. 2021 – May 2021)**

A demo day event to connect investors to early-stage healthcare startup companies. See readysethealth.io for more.

- Co-lead a team of analysts in sourcing investors and startups, developing materials, and putting on a demo day.
- Demo day consisted of live pitches and networking sessions.
- The best pitch as decided by panel of judges was awarded a $25,000 prize in non-dilutive funding.

NumC (Aug. 2020)

Recreation of the popular Python library NumPy using a C-Python interface, with an emphasis on optimizing code as much as possible.

- Top 5 fastest ranked solution in the course CS61C, Computer Architecture.
- Written in C and Python. Utilizes parallelism, vector operations through AVX intrinsics, and efficient algorithms for matrix computation. Project description: https://github.com/mohakjain/numc-Public-

SKILLS & INTERESTS

Skills: Python, C, C++, Javascript, Java, R, PyTorch, TensorFlow, Pandas, Jupyter, NumPy

Professional: Biotech Venture Capital, Computational Bio., Synthetic Biology, Gene Therapy/Gene Editing Tools

For Fun: Literature & sci-fi, Music, Pen & paper puzzles, Hip Hop Dance, Art & Design: *mohakjain.myportfolio.com*