Jordan Wells

jordantwells.com

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EDUCATION

Bachelor of Science, Chemical Engineering, August 2019 - May 2023

Biotechnology and Materials Science Tracks, Elements of Computer Science Certificate

The University of Texas at Austin

Overall GPA: **4.00/4.00** Major GPA: **4.00/4.00**

EXPERIENCE

VI Next Tech Development Intern, Regeneron Pharmaceuticals, June 2022 - August 2022

- Led the creation of recombinant proteins for exploratory technical development of a new class of medicinal biologics
- Analyzed DNA, bacterial, mammalian, and protein samples using a wide variety of biotechnology tools
- Communicated with other researchers to eliminate sources of error and noise and improve signal

Undergraduate Research Assistant, Ellington and Alper Labs, University of Texas at Austin, November 2019 - Present

- Design antibody-SARS-CoV-2 interfaces computationally with Rosetta and deep learning methods to determine potentially beneficial mutations.
- Model protein structures to be data inputs to a self-supervised 3D Convolutional Neural Network
- Write protocols to convert Neural Network output into 1000s of immediately orderable, highly efficient library primers for protein engineering
- Utilize high performance computing systems such as the Texas Advanced Computing Center alongside containerization tools such as Docker and Singularity

Rosetta Commons Summer Research Intern, University of Colorado Boulder, June 2021 - August 2021

- Developed software to rapidly test more than 10,000 small molecule drugs for protein binding
- Applied the Rosetta protein folding software suite to add allosteric control to medically important enzymes
- Communicated with other project leads to implement the protocol into their protein systems.
- Generated, organized, and analyzed small-molecule interaction datasets with 2M entries

Programming Projects, jordantwells.com

- Developed a full-stack web application using the Spotify API that creates "vibe" playlists (vibesition)
- Created a front-end interface for viewing protein crystal structure interactions in the browser (protein-viewer)
- Built a genetic algorithm for processing an image into abstract, SVG polygons using Python (minimage)

SKILLS

- Data Science (Python, TensorFlow, NumPy, Pandas, Matplotlib, Altair)
- Full Stack Web Development (JavaScript, React, Node, Next.js, tRPC, Three.js, SQL, HTML, CSS)
- Scientific Computing (MATLAB, Rosetta Commons Protein Folding Software)
- General Programming (Git, GitHub, Docker, Singularity, HPC)

POSITIONS

Freshman Representative and Service Chair, Texas AIChE
Secretary, Texas OXE, Chemical Engineering Honors society
Teaching Assistant, University of Texas at Austin (Chemical Engineering Analysis and Reactor Design)
University and Engineering Honors