

Jordan Wells

jordantwells.com

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 Intern, Regeneron Pharmaceuticals, June 2022 – August 2022

Programming Projects, jordantwells.com

- Developed a web application using the Spotify API to create playlists that transition between two songs' moods (Vibesition)
- Created an interface for viewing protein crystal structures and protein-protein interactions on a browser (Protein-Viewer)
- Implemented a full-stack web game using SQL and React based off a popular social media trend (They're a 10 but...)
- Built a genetic algorithm for processing an image into abstract, SVG polygons using Python (minimage)

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 inputs to a self-supervised 3D Convolutional Neural Network to produce meaningful information on mutational potential
- Write protocols to convert Neural Network output into orderable, highly efficient site-directed and site-saturated mutation primers for protein engineering
- Utilize distributed scientific computation systems such as the Texas Advanced Computing Center

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 datasets with millions of noisy entries

SKILLS

Technical

- Data Science (Python, TensorFlow, NumPy, Pandas, Matplotlib)
- Full Stack Web Development (JavaScript, React, Next.js, tRPC, Three.js, SQL, HTML, CSS)
- Git, GitHub
- MATLAB
- Rosetta Commons Protein Folding Software

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