# **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 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 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 library primers for protein engineering
- Utilize high performance computing 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

#### Programming Projects, <u>jordantwells.com</u>

- Developed a full-stack web application using the Spotify API that creates playlists that transition between moods (Vibesition)
- Created a front-end interface for viewing protein crystal structures and protein-protein interactions on a 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)
- Full Stack Web Development (JavaScript, React, Node, Next.js, tRPC, Three.js, SQL, HTML, CSS, Git, GitHub)
- Scientific Computing (MATLAB, Rosetta Commons Protein Folding Software)

## **POSITIONS**

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