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EDUCATION

Stony Brook University | Biomedical Engineering | Class of 2020 | Dean's List Award & Presidential Scholarship Stony Brook University | Masters Biomedical Engineering | Class of 2022 | GPA: 3.81

WORK EXPERIENCE

Graduate Research Assistant | Balazsi Lab, Stony Brook University | August 2020 - Present

- Was tasked with finding the locations of toxin-antitoxin systems (TAS) of mycobacterium tuberculosis (Mtb)
- Used bioinformatic tool M.E.M.E and Mycobrowser database to find the binding sites of the Mtb TAS VapBC35
- Accurately and efficiently detected a single major genomic region candidate for toxin system binding in Mtb

Data Science with Python | Stony Brook University | January 2020-May 2020

- Was tasked with developing a machine learning model in a Python course in order to detect facial expressions
- Utilized Python's SKL library to determine 6 types of facial expressions (happy, sad, etc.) for 26,859 images
- Achieved 96% accuracy with a Random Forest Classifier model and displayed results using matplotlib

Viral System Analysis | Stony Brook University | January 2020-March 2020

- Was tasked with computationally analyzing and visualizing activation of lambda phage viruses
- Used MATLAB to emulate Gillespie's algorithm with lambda phage parameters for behavior analysis
- Accurately emulated and visualized the lytic and lysogenic states of the lambda phage

Senior Design Project | Stony Brook University | August 2019-May 2020

- Was tasked with developing a temperature sensor for a research lab at Stony Brook
- Wrote CircuitPython code to be used on a printed circuit board (PCB) to make a temperature sensor
- Successfully and accurately detected environmental temperature data to the nearest degree using the PCB

Research Assistant | B.E.A.R. Research Group, Stony Brook University | August 2019-May 2020

- Coordinated with P.I. and research team to develop virtual laboratories
- Wrote Json code and developed three dimensional models in Blender to emulate a laboratory setting
- Paid attention to detail on objects made, and successfully emulated a person making buffer solution in a lab

Data Entry Specialist | Orlin and Cohen | June 2019-July 2019

- Worked in a clinical office setting where patient data had to be put in an electronic health records database
- Extracted and stored patient data provided by patients to an electronic health records database
- Successfully and quickly filed all patient data without making a single mistake

Administrative Assistant | Farmingdale State College | May 2018-July 2018

- Worked in an office setting where employee personnel files had to be maintained and updated every week
- Used Microsoft Word and Excel to maintain and organize all employee personnel files
- Accurately and quickly maintained all employee personnel files every day and on time

SKILLS/LIBRARIES

- >> Programming Languages: MATLAB, Python, SPSS, R, C++, SQL, Unix, Docker
- > Data Analytics Tool: Python (Pandas, Numpy, Scikit-Learn, Tensorflow)
- > Data Visualization: Python (Seaborn, Matplotlib, Plotly, Dash)
- > RDBMS: MySQL, Microsoft SQL Server (T-SQL), Oracle SQL (PL/SQL), PostgreSQL
- >> Web Development: Python
- > Soft Skills: Critical Thinker, excellent oral and written communication skills