AZRAF ANWAR

aa8542@nyu.edu ❖ www.linkedin.com/in/azraf-anwar ❖ New York, NY

EDUCATION

New York University, New York January 2021 - Expected December 2022
Degree: Master of Science, Computer Science
Honors: Merit Scholarship Recipient, Certificate of Distinction in Graduate Bridge Program

Columbia University, New York September 2014 - May 2018
Degree: Bachelor of Science, Biomedical Engineering
Honors: C. Prescott Davis Scholar, Dean's Honor List, SEF Grant Awardee, CEIF Grant Awardee, Cisco Global Problem Solver Semifinalist, Rice 360° Global Health Technologies Awardee, VentureWell E-Team Program Grant

SKILLS AND INTERESTS

Technical: C++, C#, JS, Python, SQL, Tableau, Periscope, Looker
Business Development: Agile Software Development, User Segmentation, Cohort Analysis, Funnel Analysis
Interests: Computational Modeling, Convolutional Neural Networks, Image Segmentation, NLP, Rules Extraction, Data Visualization

SELECTED WORK EXPERIENCE

University of Dhaka, Dhaka May 2020 – January 2021
Research Associate, Genomics and Bioinformatics
• Managed data analysis and implemented internal software tools using Python and SQL
• Contributed to the computational genomic analysis of SARS-CoV-2 sequences from across 6 countries with Python
• Published 3 peer-reviewed research articles published across 2 academic journals

CipherHealth, New York August 2018 – December 2019
Senior Product Architect, Data Engineering and Analytics (Feb 2019 – Dec 2019);
Product Architect, Data Engineering and Analytics (August 2018 – February 2019)
• Managed data warehouse requests and developed data dashboards and internal tools using Python and SQL
• Worked with UI/UX designers and product managers to guide product development sprints with scrum team
• Managed a team of 5 junior architects and oversaw their production of deliverables for the engineering team

Columbia University, New York May 2016 – May 2018
Intern, Computational Modeling
• Implemented a convolutional neural network using Python to detect diabetic retinopathy in patient retinal images through semantic segmentation of retinal damage from images through deep learning
• Implemented ODE models in Python and MATLAB to simulate and visualize protein dynamics

Icahn School of Medicine at Mount Sinai, New York May 2017 – September 2017
Intern, Computational Modeling
• Attended lectures on data aggregation, constraint-based modeling, dynamic modeling, stochastic simulation, rule-based modeling, multi-algorithmic simulation, parallel simulation, and modeling standards
• Implemented a new hybrid FBA/ODE models in Python to simulate and visualize protein dynamics

SELECTED PRESENTATIONS AND PUBLICATIONS

• "drCAM: Retinal Camera with Machine Learning Analysis Model." Rice 360° Global Health Design, Rice University
• "An Integrative, Genome-Scale Model of the Cell Cycle Regulation and Metabolism of Saccharomyces Cerevisiae." NY Quantitative Biology Summit, Cold Spring Harbor Laboratory
• "Emergence of European and North American mutant variants of SARS-CoV-2 in South-East Asia." *Transbound Emerg Dis*. Wiley. 2020; doi: https://doi.org/10.1111/tbed.13748
• "Comprehensive Annotations of the Mutational Spectra of SARS-CoV-2 Spike Protein: A Fast and Accurate Pipeline." *Transbound Emerg Dis*. Wiley. 2020; doi: https://doi.org/10.1111/tbed.13834