**William Feng**

21 Banbury Road • Lumberton, NJ 08048 • wcf19@scarletmail.rutgers.edu • (609) 321 0801

**EDUCATION**

**Rutgers University New Brunswick, NJ**

B.S. Candidate, Double Major in **Biotechnology** and **Computer Science**. GPA: 3.900/4.000 May 2023

Honors College, Presidential Scholar, Dean’s List, George H. Cook Scholar

Relevant Coursework: Biochemistry, Genetics, Methods and Applications in Molecular Biology, Tools for Bioinformatic Analysis, Principles of Info and Data Management, Computer Algorithms, Data Structures, Intro to Artificial Intelligence

**RELATED PROFESSIONAL EXPERIENCE**

**Bristol Myers Squibb New Brunswick, NJ**

***Biologics Development Intern***June 2022 - August 2022, 40 hours a week

* Designed and optimized a new user-friendly Next Generation Sequence variant analysis pipeline
* Quantitatively determined the impact of allele frequency threshold on number of variants detected
* Worked closely with senior scientists to determine optimal settings in Genedata Selector for variant detection
* Wrote several Python programs and utilized statistical comparison methods to aid in the analysis of NGS data
* Presented and taught usage of new pipeline to audience of 90 BMS interns and scientists

***Product Development Operations Intern*** June 2021 - August 2021, 40 hours a week

* Designed and developed a new central database and dashboard using SharePoint and Tableau to view the end-to-end process for equipment budget development, purchasing, delivery, and installation
* Created high-level visualizations for users and management
* Utilized flows in Power Automate to automate data transfer between lists and maintain data integrity
* Wrote programs in Java to generate test data for visualizations

**Chan Laboratory New Brunswick, NJ**

*Research Assistant* September 2021 - Present, 12 hours a week

* Perform statistical analyses such as t-test, ANOVA test, and Wilcoxon test with Excel and Python on the mRNA expression, copy number, and protein expression of thousands of tumor samples compiled from TCGA
* Generate Kaplan-Meier curves from clinical data to determine impact of IRAG2 expression on patient survival
* Determine potential pathogenicity of silent mutations in *TP53* gene by analyzing and comparing mutation frequency in COSMIC, gnomAD, and dbSNP databases
* Utilize cBioPortal, UCSC Xena, and IGV to extract data on p53 germline and somatic mutations

**Lumberton Emergency Squad, Station 139** **Lumberton, NJ**

*Emergency Medical Technician, Duty Crew* July 2017 - June 2020, 120 hours

* Responded to calls in cardiac, respiratory, trauma, and overdose cases and perform emergency medical care
* Ran joint aquatic, active shooter, and vehicular entrapment drills with fire and police departments
* Increased community awareness in first aid and CPR at community events and programs
* Earned New Jersey State EMT Certification and License through squad sponsorship

**LEADERSHIP**

**Alpha Zeta, professional honors service fraternity**  **New Brunswick, NJ**

*Censor (Vice President)* December 2021 – December 2022

Coordinated, supervised weekly meetings for over 50 members. Contacted over 850 students across Rutgers for recruitment. Managed social media by designing, posting promotional flyers, updating all platforms. Planned and coordinated 28 events, including community service, induction ceremonies, and brotherhood retreats. Acted as liaison between the new members and the chapter. Censored inappropriate action or conduct of members of the chapter.

**Designer Genes, Rutgers Biotechnology Club New Brunswick, NJ**

*President* September 2019 – May 2022

Planned, organized monthly speaker series events to educate fellow biotechnology students on possible career trajectories. Coordinated meeting times and travel plans with speakers. Managed logistics, including marketing, food, and attendance at meetings. Designed and distributed promotional flyers to interested students and faculty.

**SKILLS**

**Technical:** Proficient in Java, C, Python, R, and SQL, regression model building and analysis, Microsoft Office, Tableau, SharePoint, Power Automate, Genedata Selector, Integrative Genomics Viewer, Git

**Laboratory:** CRISPR gene editing, cell transfection, primer design, PCR, qPCR, DNA and RNA purification, agarose gel electrophoresis, Western blotting, ELISA, plasmid isolation, enzyme and metabolic tests, isolation of pure cultures, culturing and plating microorganisms, aseptic technique