Rahil Verma

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EDUCATION

Duke University - *B.S.E Biomedical Engineering, B.S. Computer Science, B.S. Math* *Durham, NC, Aug 2022 – Current*

- Cumulative GPA: 3.82/4.00 | ACT: 36/36 | SAT2 Math 2: 800/800

Winston Churchill High School - *H.S. Diploma* *Potomac, MD, Sep 2018 – Jun 2022*

- Cumulative GPA: 3.98/4.00 | AP Scholar with Distinction | Governor's Merit Scholastic Award

WORK EXPERIENCE

National Institute for Standards and Technologies (NIST) – *Pharmaceutical Research* *Gaithersburg, MD*
Summer Undergraduate Research Fellowship (SURF) Intern *May 2023 – August 2023*

- Conducted independently designed experiments to optimize the stability of protein-based pharmaceutical formulations
- Synthesized findings for weekly written and oral reports to my team, presented at an organization-wide showcase

Center for Global Women's Health Technologies (GWHT) – *Data Processing* *Durham, NC*
Intern *Sept 2022 – May 2023*

- Utilized MATLAB and Python to colorize and sort animal luminescence images of lung metastasis tumor signaling
- Created a novel grayscale-to-color script designed to display tumor signaling, cut processing times by hundreds of hours

University of Maryland Biomedical Research Department – *Oncology/Genetics Research* *Baltimore, MD*
Lab Assistant *June 2021 – Aug 2021*

- Investigated the causes for mutation in APE1 and SMUG1 associated genes through protein crystallization experiments

National Aeronautics and Space Administration (NASA) – *Vector-Borne Disease Research* *Remote*
STEM Enhancement in Earth Sciences (SEES) Intern *June 2020 – Aug 2020*

- Presented an independent award-winning study at 3 conferences on the effect of stormwater runoff on disease prevention

LEADERSHIP & ACTIVITIES

Duke Consulting Club – *Analyst* *Durham, NC, Sep 2023 – Present*

- Managing lauch of Glow, an app created by a tech startup targeting event planning
- Lead weekly team meetings, communicate with client, research potential markets

CS201 Data Structures and Algorithms – *Teaching Assistant* *Durham, NC, Aug 2023 – Present*

- Lead a discussion section aimed at exploring fundamental Java principles such as runtime efficiency and algorithms
- Answer student questions during weekly office hours, brainstorm teaching methods in weekly meetings

Link – *Social Media App, Founder* *Durham, NC, Jan 2023 – Nov 2023*

- Designed to encourage in-person interactions, Link is a map-based ios app that allows users to plan spontaneous events in the busy world of college campuses and cities with a frictionless user interface
- Leading a small team of developers using Xcode, Firebase, and Github, sold to Glow in November 2023

Duke Enable – *Prosthetics Development Club, Member* *Durham, NC, Jan 2023 – Present*

- Use 3D scanning, CAD, MATLAB, and medical-grade 3D printers to design prosthetics for physically disabled patients
- Developed a neural network of sensors to be used on general-use prosthetics that can be calibrated for each client

AWARDS & RECOGNITION

Awards: Community Innovation Award (Society for Science 2021), Stockholm Junior Water Prize (2021), First Place Biology Project (ScienceMONTGOMERY 2021), AP Scholar w/ Distinction (2020-22), Governor's Merit Scholastic Award
Recognition: DC News Now - "Montgomery County High School Student Explains Shocking Environmental Findings", Moco Show - "Winston Churchill High School Student Receives Internship Assisting NASA at University of Texas"
Publications: Readcube - A Multiscale Data Set Linking Remotely Sensed Land Cover With Field-Based Observation

SKILLS & INTERESTS

Technical Skills: SwiftUI, Firebase, Github, React Native, Matlab, Java, Python, JavaScript, Solidworks, Excel, Powerpoint
Biomedical Skills: Dynamic Light Scattering, Protein Crystallization, Protein Synthesis, Protein X-ray Crystallography
Interests: Backpacking, fishing, hiking, gym, cooking, golf, lacrosse, tennis, NFL, PGA Tour, cars, travel