Vishrut Tiwari

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EDUCATION

Combined Bachelor Program (3+2 program)
Columbia University | **GPA:** 3.66   New York City, NY
B.S in Computer Science   Aug 2021 - May 2023

Bard College   Annandale-On-Hudson, NY
B.A in Mathematics | **GPA:** 3.88   Aug 2018 - May 2021

Honors: Distinguished Scientist Award, Scholar-Athlete of the Year, and Dean's List (every semester)

Coursework: Data Structures, Databases, UI Design, Computer Systems, Programming Languages and Translators, Advanced Computer Vision, AI, Partial Differential Equations, and Advance Calculus

TECHNICAL SKILLS

Languages and Libraries: Java, C, JavaScript, Python, React Native, React.js, Node.js, SQL, and MongoDB

EXPERIENCE

illumina   San Diego, CA
Software Engineering Intern   May 2022 - Present
- Transformed and analyzed gene sequencing data for rare diseases for lab physicians
- Extracted and consumed data into Kafka topics increasing consumption speed by 33%
- Created case centric data tables populated from ETL pipelines with Go
- Visualized delivery time with Tableau and SQL queries for over 10,000 samples

Opal Wearables   New York City, NY
Full-Stack Intern   Sep 2021 - May 2022
- Created UI/UX wireframes for a jewelry-based safety app using Figma
- Sole engineer responsible for both backend, frontend, and establishing connection to devices
- Implemented a MVP on IOS using React Native with Bluetooth integration to phones
- Manged user authentication and data with Firebase to only allow for verified devices to connect
- Presented at conferences at the Columbia Business School and to luxury jewelry companies

Crestron Electronics   Remote
Software Engineering Intern   Jun 2021 - Aug 2021
- Built a CI/CD pipeline for touch panels that control room settings using Docker and Jenkins
- Caught major and minor bugs through writing 250 Python scripts for the panels
- Rotated teams with sales and development to understand client expectations

Innovation Club   Annandale-On-Hudson, NY
President and Founder   Oct 2018 - May 2021
- Founded a club with 15 team members collaborating on projects that innovate campus life
- Created a food funnel machine using Arduino and a robotic arm to sort snacks in addition to brainstorming a mental wellness app that helps people with chronic depression

PROJECTS

See++   Sep 2021 - Dec 2021
- Made a language called See++ using OCaml and C to build the compiler
- Wrote the foundational element to be a pixel and using the pixel you can draw art within a canvas

Beer Pong in AR   Apr 2020 - May 2020
- Created a multiplayer game in 3D augmented reality playable on any flat surface
- Added compatibility with web browsers and cameras using Javascript and Three.js

PUBLICATIONS

- **Vishrut Tiwari**, and Christopher LaFratta *"Using Computer Vision Software to Measure the Fidelity of 3D Microstructures Made by Two-Photon Polymerization"* (in press)