

# Vishrut Tiwari

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[github](https://github.com/vishrut-tiwari)

## EDUCATION

### Columbia University

Candidate for Bachelor of Science in Computer Science

New York City, NY

Aug 2021 - May 2023

### Bard College

Bachelor of Arts in Mathematics

Annandale-On-Hudson, NY

Aug 2018 - May 2021

**GPA:** 3.88

**Honors and Awards:** Dean's List, Distinguished Scientist Award, and Scholar-Athlete of the Year

**Relevant Coursework** Data Structures, Design of Programming Languages, Computer Systems, Advanced Computer Vision, Scientific Computing, Econometrics, Physics I - II, Advance Calculus, Real Analysis, Abstract Algebra, and Partial Differential Equations

## TECHNICAL SKILLS

### Programming Languages:

Proficient: Java

Worked with: Javascript, C, Kotlin, and Python

**Libraries/Frameworks and Tools:** React.js, Node.js, MongoDB, git, and Linux

## EXPERIENCE

### Crestron Electronics

Remote

#### Software Engineering Intern

June 2021 - Present

- Writing Python scripts to test various tablet device's console commands in agile sprints
- Building a CI pipeline using Jenkins on Docker to improve product reliability
- Rotating teams with sales and development to understand client expectations

### Bard College Nano and Micro Labs

Annandale-On-Hudson, NY

#### Undergraduate Researcher

Sep 2018 - Present

- Fabricated and imaged microstructures using two-photon polymerization and a SEM
- Used Structure-From-Motion techniques to convert 2D images to 3D point clouds
- Compared an ideal point cloud to recreated version to improve precision in fabrication

### Innovation Club

Annandale-On-Hudson, NY

#### President and Founder

Oct 2018 - May 2021

- Lead and managed groups through projects that innovate campus life
- Created a food funnel machine using Arduino and a robotic arm to sort snacks
- Planned a mental wellness site that helps those with chronic depression

## PROJECTS

### Koterpreter

Annandale-On-Hudson, NY

#### Inventor

Nov 2020 - Dec 2020

- Created a Scheme interpreter using Kotlin
- Created an AST, environment, and parser and utilized hashMaps, stacks, and lists

### JEV

Annandale-On-Hudson, NY

#### Inventor

Mar 2020 - May 2020

- Created my own text editor that operates in the terminal
- Made with C and includes syntax highlighting, searching, and scrolling
- Extended text editor to work on Windows and Macs

### Beer Pong in Augmented Reality

Annandale-On-Hudson, NY

#### Inventor

April 2019 - May 2019

- Created a multiplayer game in 3D augmented reality
- Added compatibility with web browsers and cameras using Javascript and Three.js