

### EMPLOYMENT

#### Rochester Institute of Technology

**Summer Research Assistant** · May 2021 to Present · Rochester NY

**Detailed analysis of more than 20 research papers targeted at the immune response of the SARS CoV-2 Virus to develop an In-host model.**

- Perform numerical simulations of mathematical models using Python and MATLAB.
- Composing scientific documentation using LaTeX.

**Resident Advisor** · Jan. 2021 to May 2021 · Rochester NY

**A Student Leadership position with the RIT Resident Life, that employed my conflict resolving and people skills.**

- Cultivated a positive environment among 40 residents.
- Directed Floor Events of up to 100 residents.
- Oversaw RIT Policies and Guidelines being followed among multiple residence halls.

#### Shashi Logistics

**Backend Intern - Java** · May 2020 to Aug. 2020 · Bareilly, India

**Back-end development for an Android Application to handle large-scale logistics.**

- Built microservices using Spring Boot framework to manage Login, Referrals, and Data Access Objects.
- Handled extensive data using MySQL and Spring JDBC.
- Revitalized the legacy PHP Code into Java which enabled the team to move to a newer framework.
- Worked in an Agile Environment with POs, architects, and 3 other developers.
- Operated AWS Cloud for file management.

### SKILLS

**PROGRAMMING SKILLS:** Java, Python, Assembly, VHDL, SQL, Verilog, HTML/CSS, Javascript, MATLAB, PHP

**SOFTWARE SKILLS:** Spring Boot Framework, MySQL, Postgres SQL, Linux, Git, Altera Quartus, MS Excel, Postman, React

### EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY · Aug. 2019 to Present

Computer Engineering BS 2024

3.91 GPA — Dean's List and a Performing Arts Scholar

Notable Courses: Assembly and Embedded Systems, Digital Systems Design, Intro to Software Engineering, Computer Science, Circuits

### PROJECTS

Microprocessor · Jan. 2021 to May 2021

**A complete 5-stage pipelined MIPS Processor.**

- Used VHDL and Verilog for HDL Description and Testbench creation.
- Operated in a Xilinx Vivado environment.
- Developed MIPS Instructions to calculate and store Fibonacci Numbers in memory registers.

Online Web-Checkers Application · Sept. 2020 to Nov. 2020

**A Locally Hosted online application to let users play Checkers online. In which, Players have the ability to sign in, play multiple games, record and review their games or even watch other ongoing matches.**

- Spearheaded a team of 4 designers, working in an AGILE environment with bi-weekly Sprint deliverables.
- Implemented REST APIs using Spark Java Framework.
- Focused on Test Driven Development through Unit Testing and Acceptance Testing, achieving +85% code coverage.
- Maintained excellent Design Documentation through regular and meaningful updates.
- Streamlined development and debugging by coordinating the team's Trello board.

Laser Placement Game · Apr. 2020

**A Java-based Puzzle game following the MVC pattern.**

- Implemented Backtracking Algorithm for an automatic solver and provide hints, which solved an 8\*8 grid in under 20 seconds.
- Added a JavaFX GUI which was awarded bonus points for execution.

### ACTIVITIES

President of RIT Oasis— Organization for the Alliance of Students from the Indian Subcontinent.

HackerRank · Java Gold Badge, Problem Solving Silver Badge