Shimanto Bhowmik

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Education

Rochester Institute of Technology — Rochester, N.Y.
Bachelor of Science in Computer Science — *Aug. 2021 – May 2026*
Cumulative GPA: 4.0/4.0

Experience

Incoming SDE Intern — August. 2023 – December 2023
Sage - Part-Time — Remote

- Aim to use large language models to build financial analysis tools.
- Going to use React, Python, nest-js, lang chain to automate tasks and build scalable softwares.

SDE Intern — May. 2023 – August 2023
Amazon Alexa — Seattle, WA.

- Contributed to the evaluation of state of the art large language models based on performance criteria.
- Developed infrastructure to help scientists do rapid experimentation of large language models.

Section Leader — April 2023 – June 2023
Stanford University — Remote

- Volunteered as a Section Leader for Stanford's Code in Place course, guiding 25 diverse students through Python programming fundamentals and providing feedback on assignments.
- Collaborated with instructors and Section Leaders to create a supportive learning environment resulting in high retention rates and positive student feedback.

Research Assistant — Jan 2022 – May 2022
Department of Computing Security, Rochester Institute of Technology — Rochester, N.Y.

- Built Python programs and scripts to automate processes such as Excel functions.
- Programmed server-side databases using MySQL and socket programming.
- Programmed Raspberry Pis to simulate realistic exchange of data among SmartMeters, Aggregators and Electrical Utility Units using an improved Shamir's Secret Sharing Scheme.

Projects

Deshi Food

- E-commerce model-based restaurant website built using React, Redux, Sass, Firebase, and deployed on Netlify.
- Migrated codebase to Typescript, improving code quality, maintainability, and safety

Math Mania

- Created a gamified approach to teach my 7-year-old niece how to add/subtract. Built by training an AI model on the MNIST dataset to recognize handwritten numbers from 0 to 9, then used TensorFlow to classify the handwritten digits and visualized the model over time using TensorBoard to analyze performance.
- Converted the model to TensorFlow.js to create a math-based game on HTML, CSS, JS where the model was used to estimate digits drawn on the HTML Canvas.

Technical Skills

Languages: Python, Java, C, C++, SQL (Postgres), JavaScript, HTML/CSS, TypeScript
Frameworks: Angular, React, Node.js, Spring Boot, NestJS
Developer Tools: Git, VS Code, Visual Studio, PyCharm, Maven, IntelliJ, Jupyter Notebook, Amazon AWS
Other: Machine Learning, Natural language processing, Neural Networks, Tensorflow