Shreyas Kumar

Education

National Institute of Technology, Rourkela

September 2023 – Present

Bachelor of Technology in Electronics and Communication Engineering (CGPA - 8.41)

Rourkela, Odisha

Ryan International School, Raipur

May 2023

AISCCE - CBSE, Science (PCM) (Percentage - 88%)

Raipur, Chhattisgarh

St. Xavier's High School, Raipur

May 2021

CISCE - ICSE (Percentage - 89%)

Raipur, Chhattisgarh

Relevant Coursework

• Data Structures and Algorithms

• Object Oriented Programming

• Embedded Systems

• Database Management Šystems

• Digital Electronics

• Introduction to AIML

Projects

Logiance

February 2025 - April 2025

Go, Scripting, Docker, Postgres

logian ce logistics.com

- A startup project built in collaboration with NIT Rourkela students which provides a shipment and product tracking service to vendors, providing different variety of options to develop their business.
- Built on a API Gateway microservice architecture, payment service and methods were integrated on top of wallet based transaction system with options for scheduled COD Remittance.
- A cloud native approach with use of Docker and Kubernetes for development was taken with GitHub actions for automation, intergrated with tools like Skaffold and NGINX.
- Webhook based workflows were developed with secure payment methods with signature verification.

Chip-8 Emulator May 2025

Go, Ebitengine

GitHub Releases

- Designed and implemented Chip-8 CPU for emulation using Go, replicating the original architecture and instruction set.
- Validated emulator accuracy using ROM test suites (e.g., IBM Logo, BC-test, Pong, RPS) and custom unit tests for opcode behavior.
- Implemented pixel-based rendering via Ebitengine's 2D canvas, supporting 64x32 resolution with custom multiplier, XOR-based sprite drawing and configurable color palettes.

SimpliBlog June 2024 – January 2025

Svelte / SvelteKit, NGINX, Shadon-Svelte, Node.js, GitHub Actions (CI/CD)

GitHub simpliblog.site

- Developed a blogging and networking platform for NIT Rourkela students, featuring Markdown-based content creation, categorization, and a sleek, minimalist user interface.
- Integrated a fuzzy search API with MongoDB to enable effective topic-based searching across 100+ Markdown blogs with images, with a well architected Node.js backend.
- Implemented CI/CD pipelines using GitHub Actions, streamlining the development workflow for automated testing, building, and deployment.
- Deployed the application on a VPS with NGINX for optimized performance, incorporating rate limiting, enhancing security, preventing abuse, and ensuring a reliable user experience.

Achievements/Certifications

• Samagam 2024 Hackathon Winner

☑ LinkedIn Janua

January 2024

Secured 1st position in the Samagam Intrauniversity Hackathon by providing an innovative solution for the simulation of the stock market over a period of 7 days.

Technical Skills

- Languages: Go, JavaScript, Kotlin, C, Java, Bash, Python
- Developer Tools: Linux, Terminal, API Clients, Neovim, FTP/SFTP Clients, IntelliJ Idea, VS Code
- Technologies/Frameworks: Svelte, Tailwind, BubbleTea, Express, NGINX, EbitEngine, Docker, GitHub Actions

Extracurricular Activities

Open Sourcing at Apache Datafusion

March 2025 - Present

Contributor

Apache Software Foundation

• Authored/Resolved issues and PRs regarding implementation of tree-explain format of query analysis, migrating tests and adding code for multiple operators for DataFusion query engine.