Shivam

 github.com/shivam1817 | linkedin.com/in/shivam1817 | shivam.chem21@gmail.com

EDUCATION

Indian Institute of Technology Guwahati, India	Nov 2021 - Present
Bachelor of Technology in Chemical Science and Technology	CGPA: 7.13/10
Darbhanga Public School	2020
Senior Secondary, CBSE Board	Percentage: 92.6%

EXPERIENCE

CloudGrep — *May 2024 - July 2024*
Software Development Engineer Intern

- **Designed and optimized** full-stack features for a **Firecracker VM orchestration** platform using **Next.js, TypeScript, Go, and MongoDB**, improving **performance by 35%** through efficient **SSR and SSG** strategies.
- **Integrated** RESTful API endpoints with **platform-engineering wrapper functions**, streamlining **Firecracker VM lifecycle** management, reducing deployment time by **40%**.
- **Developed** real-time functionality by **orchestrating WebSocket connections**, enabling **seamless microservice communication** and live updates, decreasing **latency by 50%**.

PROJCTS

Chatify — Jun 2023 - Jul 2023
Team Project, Coding Club — github.com/Shivam1817/Real_Time_Chat

- Developed a web application having multiple chat rooms and multiple users can experience **real-time messaging**.
- Utilized **HTML, CSS, and JavaScript** for the front-end and **Node.js** with **Express.js** for the back-end of Chatify, demonstrating **full-stack development** skills. Implemented time stamps alongside user-sent messages for clarity.
- Implemented **MongoDB** for robust database management and **socket.io** for real-time communication, establishing efficient connections between the server and clients to enhance interactive features and **data synchronization**.
- **Tech Stacks**: HTML, CSS, and JavaScript, Nodejs, ExpressJs, MongoDB, Socket.io

Banking App — Apr 2024 - Jun 2024
Team Project — github.com/Shivam1817/Banking-App

- Built a secure financial platform using **Next.js**, enabling real-time transaction tracking system, integrating multiple banks via **Plaid**, and facilitating seamless fund transfers between the accounts through **Dwolla's** payment gateway.
- Implemented a responsive, mobile-first design and ensuring a consistent user experience across all devices while effectively displaying detailed **financial summaries** and **transaction histories** for users on the platform seamlessly.
- Designed and implemented ultra-secure **SSR** authentication along with efficient data management, ensuring **real-time updates** and secure transactions across multiple bank accounts, providing a robust and reliable user experience.
- **Tech Stacks**: NextJs, Typescript, Appwrite, Tailwind, ShadCN, Zod, Plaid

File Compressor — Oct 2023 - Nov 2023
DSA Project — github.com/Shivam1817/File-Compressor

- Developed a text file **encoder** and **decoder** using **Huffman algorithm**, achieving **44.26%** data compression ratio.
- Implemented a **Hash table** to accurately track **character frequencies** and construct the Huffman encoding tree.
- Converted data into a compact **binary format** using **tree traversal**, encoding via Huffman tree's **leaf nodes**.
- Optimized data storage by **encoding text files**, ensuring efficient compression through **Huffman tree** construction.

TECHNICAL SKILLS

Programming Languages: C/C++, JavaScript, Typescript, Python*, SQL
Web Technologies: HTML, CSS, ReactJs, NextJs, Tailwind, NodeJs, Express, ShadCN, Zod
Database Database Management System (DBMS), MongoDB, postgreSQL
Miscellaneous: Object-Oriented Programming (OOPs), Operating System, Computer Networks, Postgres

KEY COURSES TAKEN

- **Node.js:** Backend Development with Node.js under Student Web's Committee (SWC) IITG
- **React.js:** Frontend Development with React.js workshop under Student Web's Committee (SWC) IITG
- **Computer Science:** Introduction to Computing, Computing Laboratory, Computational Chemistry

POSITIONS OF RESPONSIBILITY

- **Core Team, Media, Rights and Responsibilities Club, IIT Guwahati** — May 2023 - May 2024
  - Managed social media accounts, successfully increasing follower count by nearly 50% to enhance the club's presence.
- **Core Team, Alcheringa, IIT Guwahati** — June 2022 - March 2023
  - Collaborated with 30 members and 80 executives, ensuring the security of a festival with over 150,000 attendees.

ACHIEVEMENTS AND EXTRACURRICULAR

- **Competitive Programming:** Solved **1000+ problems** on different coding platforms. — current
- **Spardha, Inter Hostel Competitions:** Won **Bronze medal** in Water Polo, represented Barak Hostel. — 2023
- **CRM Executive, Alcheringa, IIT Guwahati** — June 2022 - March 2023
- **JEE Advanced:** Ranked in the **Top 8%** among 150,000 students. — 2021