Shivam

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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

- Built full-stack features using **Next.js, Node.js, and MongoDB**, focusing on efficient **API integration**, robust error handling, and optimized **SSR strategies**.
- Implemented secure backend features including **JWT authentication**, **role-based access control**, and **async data handling** with Promises to improve performance and access control.
- Optimized user experience and responsiveness using **React Hooks**, lazy loading, **memoization**, and **server-side caching**.

PROJECTS

Blogify   jan 2024 - march 2024
Solo Project   github.com/Shivam1817/BlogifyX

- Engineered a **full-stack blogging platform** (Medium-inspired) enabling authenticated users to **write, read, and manage posts**; backend built with **Cloudflare Workers, Hono framework, and PostgreSQL** (via Prisma **ORM**).
- Integrated **Zod** for **schema validation, Prisma Accelerate** for **connection pooling** and **real-time performance optimization**, ensuring robust and efficient data handling.
- Deployed the backend leveraging **Cloudflare Workers** for **edge compute performance** and **scalable execution**, delivering a responsive user experience.
- **Tech Stacks**: React, TypeScript, Zod, Cloudflare Workers, Hono, Prisma, PostgreSQL.

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

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, Hono, Cloudflare Workers, ShadCN, Zod
Database Database Management System (DBMS), MongoDB, postgreSQL
Miscellaneous: Object-Oriented Programming (OOPs), Operating System, Computer Networks, Prisma

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