Akash Upadhyay

Akash Upadhyay | akashupadhyay055@gmail.com | 9888611023 | Portfolio

Education

Sant Longowal Institute of Engineering and Technology — Nov 2022 - May 2026
BTech Mechanical Engineering — *Current GPA: 8.17/10.0*

Shree Jain Vidyalaya, Kolkata — Aug 2018 - Feb 2020
Higher Secondary (Class 12th), WBCHSE — *Percentage: 82.60%*

I.P. Memorial High School, Howrah — 2008 - 2018
Secondary (Class 10th), WBBSE — *Percentage: 80.42%*

Coursework

Courses: Data Structures & Algorithms, Web Development

Skills

Languages: C++, JavaScript, Motoko, TypeScript, SQL

Tools/Platforms: Git, GitHub, VS Code, Postman, Docker

Development Methodologies: Monorepo(Turborepo)

Web Frameworks/Libraries: Next.js, Node.js, Express.js, React, Tailwind CSS

Databases/ORMs: PostgreSQL, Prisma

Projects

Payment Transfer Web Application | *Next.js, Typescript, NextAuth.js, Prisma, Tailwindcss, Docker, Turborepo*

- Developed a full-stack payment application mirroring Paytm's core functionality, processing simulated transactions with 99.99 per cent accuracy using technologies like React, Node.js, and MongoDB.
- Configured the system to handle concurrent requests with zero crashes during stress test using local environments.
- Created a custom webhook system to simulate real-time payment updates, enabling independent testing without relying on third-party services.
- Engineered a RESTful API utilising Prisma ORM and PostgreSQL, enabling asynchronous updates and improving API response time while ensuring consistent data across all microservices.
- Styled fully responsive user interface components with TailwindCSS, ensuring seamless performance across mobile and desktop devices.
- Organised the project using Turborepo monorepo structure, reducing overall build and deployment time and improving code reusability.
- Live: Paytm App

Decentralised Token Application | *JavaScript, Node.js, React.js, Tailwind CSS, Motoko, DFINITY SDK(dfx)*

- Developed token canister in Motoko, enabling creation and transfer of up to 1,000,000,000 tokens with persistent state storage on the Internet Computer.
- Integrated React.js frontend with DFINITY backend APIs, reducing token transfer execution time in local testing.
- Implemented balance retrieval and transaction history features, handling concurrent requests without failure during stress testing
- Designed responsive UI using TailwindCSS, achieving 100 per cent mobile and desktop compatibility across different tested screen sizes.
- Code: Crypto Token Repository

Achievements

Solved over 300 Data Structures and Algorithms problems on platforms like Leetcode, GeeksforGeeks, and CodeStudio.

Led voter awareness drives through SLIET Electoral Literacy Club, engaging hundreds of students across the campus .

Represented my school at a State-level Spell Bee competition, ranking among top finalists.

Extracurriculars

Represented school/college in 10+ debate competitions, honing public speaking and critical thinking skills.

Ardent follower of global affairs with keen interest in DIY engineering projects.