

# Shubham Jha

shubhamjha3004@gmail.com — GitHub — LinkedIn — LeetCode

**Education:** B.E. in Information Technology, Vivekanand Education Society's Institute of Technology (2022–Present), CGPA: 9.35 / 10



## Experience

### Software Development Engineer Intern

AudioPod AI — Remote

Feb 2025 – Mar 2025

React.js, Python, TypeScript

- Built functional UI components using **React** and designed web pages.
- Contributed to backend features in **Python**, handling error notification feature.

## Projects

### Open Brain | Full Stack Link Storage App — React, TypeScript, Node.js, Express, MongoDB, Mongoose, JWT

GitHub

- Designed and developed a full-stack notes management application.
- Created a **custom UI component library** for a consistent, scalable frontend without external frameworks.
- Implemented **secure JWT-based authentication** with automatic token validation for seamless user sessions.
- Used **MongoDB and Mongoose** to support CRUD operations and **public/private content access control**.
- Integrated **vector database for semantic search** to enhance contextual document retrieval.
- Built a **fully responsive frontend** for desktops, tablets, and mobile devices.

### NetBank Wallet like Application | React, Node.js, Express, MongoDB, Tailwind

GitHub

- Developed a wallet application to simulate peer-to-peer transactions using **dummy balances**.
- Implemented **secure user authentication** and transaction handling with balance updates.
- Designed RESTful APIs for user onboarding, sending, and receiving funds, with MongoDB as the primary database.
- Integrated input validation using **Zod** and followed modular backend structure for scalability.

### Micrograd Engine | Python, OOP, Neural Networks

GitHub

- Reimplemented the core of **Micrograd**, a minimal autograd engine from scratch using object-oriented Python to understand gradient tracking and custom backpropagation.
- Built a basic neural network trained with manually calculated gradients, solidifying concepts of forward and backward passes.
- Architected a minimal autodiff engine by modeling operations as computation graphs, enabling intuitive understanding and traversal of gradients during backpropagation.

## Leadership / Extracurricular

### CSI, VESIT — Operations Officer

Nov '23 – May '25

- Hosted a **DSA mentorship session** for 100+ juniors, boosting club's tech engagement.
- Contributed in sponsor pitching and secured **Garnier** as an event sponsor.

## Achievements

**Competitive Programming:** Codeforces 1200+ (pupil), Leetcode 1840+ (Knight), 900+ questions solved.

**Mock Placements:** Winner of “Campus to Corporate” by ISTE VESIT.

**Contests:** 2nd Runner-Up in DSA contest by Coding Ninjas (150+ participants).

**Ideathon:** 1st place at college-wide Ideathon hosted by AI Council.

## Technical Skills

**Languages:** Java, JavaScript, Python, TypeScript, SQL

**Frameworks/Libraries:** React, Next.JS, Node.JS, Express, Tailwind, Mongoose, Prisma

**Database:** MongoDB, PostgreSQL