

# Shubham Jha

— 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**.
- Contributed backend features in **Python**, including error notification systems.

## Projects

### Portfolio Website | React, TypeScript, Tailwind, Radix UI, Node.js, HTML5 Canvas, Vercel

Live, GitHub

- Engineered a high-performance **HTML5 Canvas starfield and constellation renderer** using vector physics and a custom **useStarField** hook, optimized for mobile memory usage and frame stability.
- Designed a **custom useDrag hook** with threshold-based intent detection to strictly separate drag vs click semantics, resolving pointer-event conflicts with Radix UI's controlled **DropdownMenu**.
- Architected interaction state to **decouple gesture intent from component visibility**, preserving Radix lifecycle guarantees while enabling draggable, thumb-reachable UI on mobile.
- Deployed **serverless middleware on Vercel** to aggregate GitHub and DSA metrics, implementing response caching and secure token handling to mitigate external API rate limits.
- Implemented an accessible **contact and notification pipeline** using Radix Forms, native **FormData**, Nodemailer, and toast-based UX feedback.

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

GitHub

- Designed and developed a full-stack notes and link management platform with semantic search.
- Built a **custom UI component library** for consistent, scalable frontend architecture.
- Implemented **secure JWT-based authentication** and fine-grained public/private access control.
- Integrated **vector search** for contextual document retrieval.

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

GitHub

- Developed a peer-to-peer wallet simulation with secure authentication and transactional balance updates.
- Designed RESTful APIs with validation, modularization, and balance consistency guarantees.

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

GitHub

- Reimplemented a minimal autograd engine to understand computation graphs and backpropagation.
- Built a neural network with manually implemented forward and backward passes.

## Technical Skills

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

**Frameworks:** React, Next.js, Node.js, Express, Tailwind

**Databases:** MongoDB, PostgreSQL

## Leadership / Extracurricular

### CSI, VESIT — Operations Officer

Nov 2023 – May 2025

- Conducted DSA mentorship sessions for 100+ juniors.
- Secured Garnier as a sponsor through corporate outreach.

## Achievements

**Competitive Programming:** Codeforces 1200+, LeetCode 1840+, 900+ problems solved.

**Mock Placements:** Winner – Campus to Corporate (ISTE VESIT).

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

**Ideathon:** 1st place, AI Council College Ideathon.