

SUSHOVAN GHOSH

Kolkata, India

Gmail — GitHub — LinkedIn

Summary

Aspiring software developer with a strong command over full-stack web engineering, building scalable, performance-driven applications. Actively works with Web3 and decentralized architectures, focusing on real-world systems and protocol-level thinking. Strong in data structures and core computer science fundamentals through competitive coding, while exploring AI/ML for intelligent, data-driven solutions.

Technical Skills

- **Programming Languages:** C, C++, Python, JavaScript, TypeScript, SQL
- **Full-Stack Web Engineering:** HTML5, CSS3, Tailwind CSS, React.js, Next.js, Node.js, Express.js, Flask, Jinja, REST API Design & Integration
- **Databases & Data Management:** MongoDB, Firebase (Firestore, Auth), PostgreSQL, Prisma ORM
- **Blockchain & Decentralized Systems:** Solidity, Hardhat, Ethereum Virtual Machine (EVM), SCD
- **Artificial Intelligence & Machine Learning:** NumPy, Pandas, Scikit-learn, Exploratory Data Analysis
- **DevOps & Deployment:** Docker, Dockerfiles, Containerized Application Deployment, CI/CD

Professional Experience

Hacktoberfest — Open Source Contributor

Oct 2024 – Oct 2024

- Enhanced frontend interactivity and performance using HTML, CSS, and JavaScript by implementing animation-driven UI improvements and optimizing responsiveness, accessibility, and load times.

GirlScript Summer of Code (GSSoC) — Open Source Contributor

Oct 2025 – Oct 2025

- Collaborated with distributed open-source teams to design full-stack features and develop backend logic and REST APIs, improving code quality, maintainability, and system reliability.

Projects

AeroSense — AI-Powered Environmental Monitoring & Weather Intelligence Platform 🌱

Dec 2025

Tech Stack: Next.js, React, Node.js, WebSocket, Arduino, Python, PyTorch, OpenWeather API, IoT Sensors

- Architected a real-time IoT-driven monitoring platform with a live Next.js dashboard and WebSocket-based data streaming, integrated with a PyTorch transformer-based pipeline for scalable AI-powered weather forecasting.

NovaAid — Blockchain-Powered Refugee Assistance Platform 🌱

Oct 2025

Tech Stack: Next.js, TypeScript, Node.js, Express, Celo Blockchain, Solidity, Firebase, Clerk, Semaphore (ZK), WebRTC

- Engineered a decentralized aid platform leveraging the Celo blockchain and zero-knowledge identity for privacy-preserving verification, featuring secure dual-role portals, real-time dashboards, SOS alerts, WebRTC communication, and AI-driven fraud detection.

Digital Health Records (DHR) — Decentralized Medical Records Management System 🌱

Sept 2025

Tech Stack: React, TypeScript, Node.js, Express, Algorand Blockchain, IPFS, Firebase, Clerk, Tailwind CSS

- Developed a decentralized medical records system using Algorand for immutable verification and IPFS for encrypted, tamper-resistant storage, integrating wallet-based authentication, role-based access control, and a responsive end-to-end records dashboard.

Education

Bachelor of Technology — Computer Science Engineering

Aug 2024 – Aug 2028

Techno India University

Additional Information

- Solved **120+** algorithmic problems across LeetCode, GeeksforGeeks, and HackerRank.
- Secured **Third Runner-Up** position in a hackathon; participated in a total of **6** hackathons.
- Achieved **AIR 5270** in **WBJEE 2024** (among 0.15 million candidates).
- Achieved **AIR 19000** in **JEE Main 2024** (among 1.2 million candidates).