Tushar Tuteja

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Software Engineer experienced in backend development, AI integrations, and blockchain applications. Skilled in building scalable APIs, decentralized systems, and real-time platforms using Node.js, React, Docker, AWS and Solidity.

EDUCATION

Deenbandhu Chotu Ram University of Science and Technology

Sonipat, Haryana

Bachelor of Technology (CSE) - 8.1

2021 - 2025

EXPERIENCE

Some1 AI

Aug. 2025 – Oct. 2025

Backend Developer

United Kingdom (Remote)

- Developed and maintained FastAPI-based RESTful APIs for Anthropic Computer Use, an AI-driven system enabling large language models to interact with computers programmatically (e.g., opening apps, browsing, performing tasks). Implemented endpoints for task management, result fetching, VNC session control, and idle instance shutdowns.
- Implemented a modified hybrid search (keyword + semantic) on a 2.3 million-item dataset, optimizing RAG performance and reducing search time by 60%.
- Built automated scripts for data parsing, creating embeddings, and uploading to a vector database, streamlining large-scale data ingestion.
- Optimized backend APIs for Some1.ai's platform, improving response times by 40% through query optimization and caching.

BilvaLeaf Private Limited

Feb. 2025 – July 2025

Backend Developer Intern

Project: Little Steps

- Deployed 5+ smart contracts (booking, escrow, Chainlink) on Polygon, reducing manual effort by 80%.
- Integrated IPFS and uPort/ENS for decentralized storage of health and learning records

Project: Template Firm

- Developed 8+ secure REST APIs for user and category management.
- Integrated backend with dynamic React admin panel with modals, validation, and alerts.

PROJECTS

MeetNow | MediaSoup, WEBRtc, Nodejs, React, MySQL, Socket.IO

Github Link

- Developed a real-time video conferencing app with dynamic per-user audio/video track production.
- Integrated a custom SFU using mediasoup, supporting 100+ users per meeting.
- Achieved 200ms average join latency using a custom Socket.IO signaling system.
- Enabled individual producer-consumer mapping and permission-based media flow, reducing latency and prompts by 40%.

CodeSphere - Cloud IDE for Developers | Docker, NodeJs, Socket.IO, React, Monaco Editor

Github Link

- Created a web-based IDE supporting Python, Ruby, Node.js with Monaco Editor for smart editing.
- Used **Docker** for isolated, secure and scalable containerized environments; improved startup speed by 20%.
- Enabled real-time file saving with **Socket.IO**, minimizing workflow disruptions.

Blockchain-based Telegram Subscription Bot | Docker, NodeJs, Web3js, AWS, Smart Contracts

Live Link

- Developed and deployed a Telegram bot for a client to automate USDT/USDC subscription payments on Binance Smart Chain and Base network.
- Successfully handled \$6,000+ in transactions with 500+ registered users.
- Implemented **per-user wallet generation**, **block confirmations**, and auto-access to private Telegram groups upon successful payment. .

TECHNICAL SKILLS

Programming Languages: C++, Python, JavaScript, Solidity

Web Development: React, Node.js, Express.js, Bootstrap, Chakra UI Blockchain Development: Solidity, Web3.js, Web3.py, Hardhat, IPFS Databases & Cloud Storage: MongoDB, MySQL, Supabase, Qdrant

DevOps & Cloud Platforms: Docker, AWS (Elastic Beanstalk, S3, Route 53, Lambda, EventBridge, IAM, EC2,

Amplify)

Developer Tools & Frameworks: Git, Socket.IO, Mediasoup, WebRTC, New Relic

Operating Systems: Linux, Windows

ACHIEVEMENTS

- Solved 200+ Leetcode problems, showcasing problem-solving skills.
- Secured Global Rank 880 in CodeChef Starters134 among 22,824 participants.
- Participated in Vihaan 6.0 Hackathon organized by DTU.