

# Mohammad Hatif Osmani

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## SUMMARY

Result-oriented final year undergrad, enthusiastic about software engineering and building business solutions. Skilled in backend and frontend development, and creating eCommerce websites from scratch.

## EDUCATION

**Jadavpur University**, Kolkata, West Bengal

Expected Graduation 2026

- *BE in Electronics and Telecommunications Engineering*

**St Augustine's Day School**, Kolkata, West Bengal

2021

- *ISC*

## TECHNICAL SKILLS

- *Computer Languages:* Python, JavaScript/TypeScript, C, C++, Golang, Rust, Solidity
- *Frameworks:* React, React Native, Next.js, Svelte, Node.js, Express.js, Flask, FastAPI, Django
- *Tools:* Keras, Tensorflow, PyTorch, Langchain, DsPy, AutoGen, Git, GitHub, PostgreSQL, MongoDB, Neo4.js, Firebase, Langgraph, Mastra
- *Skills:* Learning, Artificial Intelligence, Computer Vision, Natural Language Processing, Full Stack Development

## WORK EXPERIENCE

**Invisible Technologies**, Remote

October 2024 - Present

*AI Engineer: Software Development Team* (February 2026- Present)

- Generate ideal conversation examples and distinguishing facts from context.
- Evaluating the AI's accuracy/safety
- Testing the AI to identify and fix weaknesses.
- Perform Supervised Fine Tuning (**SFT**) and Reinforcement Learning from Human Feedback (**RLHF**) to adjust ai to software development and full stack data.

*Intern AI Engineer: STEM Advanced Team* (November 2024 – February 2026)

- Generate ideal conversation examples and distinguishing facts from context.
- Evaluating the AI's accuracy/safety
- Testing the AI to identify and fix weaknesses.
- Perform Supervised Fine Tuning (**SFT**) and Reinforcement Learning from Human Feedback (**RLHF**) to adjust ai to STEM data.

*Intern AI Engineer: Multilingual Team* (October 2024 – November 2024)

- Generate ideal conversation examples and distinguishing facts from context.
- Evaluating the AI's accuracy/safety
- Testing the AI to identify and fix weaknesses.

**Xade Finance**, *Generative AI Intern*, Remote

November 2023 – January 2024

- Conceptualized and developed the financial advisor chatbot from the ground up.
- Implemented natural language processing algorithms along with OpenAI Assistants API and integrated it with Coin Gecko API and OpenBB database.
- Created algorithms to analyse user inputs and provide tailored recommendations based on their financial goals, risk tolerance, and other relevant factors that increased user-interaction with the application.
- Collaborated with the existing development team, to seamlessly integrate the chatbot into both the website and the mobile app.
- Conducted rigorous testing to identify and address any bugs and usability issues.
- Monitored user feedback and behaviour to optimize the chatbot's performance and enhance its functionality over time.
- Improved latency and UX.

## PROJECTS & LEADERSHIP EXPERIENCE

Algorand MCP, Built at *Algorand Buildstation Kolkata*, 2025

September 2025

- Built the **Algorand MCP Server v0.1.1**, a comprehensive **Model Context Protocol (MCP) server** offering **50+ tools** for Algorand blockchain development — including account management, asset operations, smart contracts, API integrations, and swap functionality.
- **Integrated Pera Swap SDK and Raycast Extension**, enabling **DEX aggregation**, **real-time swaps**, and **native macOS integration** through Raycast for enhanced developer accessibility.
- **Implemented strong security measures** such as **AES-256-GCM wallet encryption** and **Zod-based input validation**, ensuring safe and production-ready operations across testnet and mainnet.
- **Selected for the Algorand HackSeries**, this project aims to become the **foundation for AI tooling within the Algorand ecosystem**, powering intelligent automation and developer-friendly AI integrations.

Agent Smith, Built at *Co-Creating with GPT-5*, 2025

August 2025

- Built an **open-source visual agent creation platform** built using **Google's ADK** simplicity and **GPT-5's brains**.
- Users describe their agent requirements in natural language, and our **AI meta-agent system** automatically generates complete Python **agent code with custom tools**, provides a **modern web interface** for visual management, and **enables real-time testing** and iteration.
- This project was one of the **top projects** at the hackathon.

Solana MCP, Built at *MASTRA.BUILD Templates Hackathon*, 2025

August 2025

- **Developed the Mastra Solana MCP Server**, a **Model Context Protocol (MCP) server** built with the **Mastra.ai framework** to enable standardized AI-driven access to **Solana blockchain operations** such as wallet management, transactions, and network control.
- Implemented **12+ modular tools** for keypair generation, token account management, SOL transfers, transaction monitoring, and RPC configuration — all with **Zod-based schema validation** and **TypeScript type safety**.
- Engineered a **clean, modular architecture** with distinct handler and tool layers, **structured logging (Pino)**, and full **devnet/mainnet switching** for real-world deployment.
- **Won a prize at the Mastra Templates Hackathon**, recognized for advancing **AI-integrated blockchain tooling** and building the foundation for **agentic workflows on Solana**.

Qubic-Solana Bridge, Built at *RAISE YOUR HACK*, 2025

July 2025

- Designed a **secure bi-directional Solana–Qubic bridge** enabling token and message transfers between networks.
- Implemented **lock/mint & burn/unlock mechanisms** and a **multi-signature guardian network** to ensure decentralized verification and asset security.
- Leveraged **C++ (Qubic)** and **Rust (Solana)** smart contracts for high-performance, production-ready cross-chain interoperability.
- This project is currently under review for incubation within the Qubic ecosystem.

LITLIB, Open-Source Contributor

June 2024 - Present

- Contributed to open-source Library Management System.
- Created the transaction history feature of the application and simplified Issue/Return feature of the application.
- Improved UI/UX by setting up a centralised design system

Consesia, Built at *HackNITR*. 2024

March 2024

- This is a **decentralized application** for polling and surveying. In layman terms, it is a **decentralized** version of Google Forms.
- Built at HackNITR 5.0, an **MLH hackathon** organized in at **NIT Rourkela**.
- This **project won the Flow prize at the hackathon**.

Indian Carpool Business, Freelance Developer

February 2024

- Built this website as a freelance developer for an inter-state carpool and transportation business.
- Built using React, Firebase, Tailwind CSS.
- Worked on SEO to improve page ranking.

- Helped bringing in traffic that increased regional sales.

## RESEARCH PAPERS

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### [Harnessing Deep Learning for Diseased and Fresh Orange Detection](#)

October 2024

- Presented at 2024 IEEE Thirteenth International Conference on Image Processing Theory, Tools and Applications (IPTA).

### [Towards Sustainable Aquaculture: Real-Time Detection of Freshwater Fish Species in the Indian Subcontinent](#)

October 2024

- Presented at 2024 Indian Engineering Congress.

## AWARDS AND ACHIEVEMENTS

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VibeSprint 1.0 by The Product Folks Winner

December 2025

Algorand Hackseries 2.0 India Winner

December 2025

Algorand Buildstation - Kolkata Edition Winner

September 2025

Threshold Cryptography Bootcamp Winner, [Randamu](#)

September 2025

MASTRA.BUILD Templates Hackathon Winner, [Mastra](#)

August 2025

Flow Prize, [MLH](#)

March 2024

Top 5 Teams @ Bit n Build Hackathon by GDSC India

February 2024

Coordinator, JU E-Cell

July 2023 – July 2024