Aaman Alok Bhowmick

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Professional Summary:

Full-stack and AI engineer with 2+ years of experience turning LLM ideas into production products. At Livlong 365, I built a multilingual voice AI agent that holds live phone conversations with customers, and I ship the web platforms and APIs around it using Next.js, React, TypeScript, Python, and FastAPI. I enjoy making Generative AI systems fast, cost-efficient, and reliable, from RAG and small-model routing to real-time speech pipelines. Promoted to Assistant Manager grade and recognised with two company awards.

Experience:

Livlong 365 | Software Engineer (promoted to Assistant Manager grade, Nov 2026) | Jul 2024 - Present

- Built and deployed a production multilingual voice AI agent that handles concurrent live phone calls, using a full-duplex audio pipeline (Tata Tele Smartflo, Sarvam AI STT/TTS, OpenAI LLMs) with barge-in, silence, and turn detection across multiple Indian languages.
- Built and scaled customer-facing and internal operations-team platforms with Next.js, Node.js, Remix, React Router, TanStack Router, and TypeScript, creating reusable UI components shared across workspaces.
- Developed low-latency, maintainable backend APIs using FastAPI, Hono, and Express.js.
- Leveraged AI-assisted development tools (Cursor, Claude Code) across projects to speed up prototyping, debugging, and delivery, while owning architecture decisions and testing.
- Collaborated cross-functionally with Product, Business Development, and QA teams across all projects to gather requirements, validate releases, and refine systems from prototype to production.

Pixolo Production | Front-End & Integration Developer Intern | Jan 2023 - Feb 2023 & Nov 2023 - Jan 2024

- Built and integrated responsive frontend interfaces using React, Angular, Ionic, HTML, CSS, and JavaScript.
- Contributed to project architecture and improved the continuous integration workflow in a cross-functional team.

IEEE VESIT | Junior Web Developer | Aug 2022 - Apr 2023

- Built and launched the student-facing IEEE VESIT chapter website, giving students a single place to find events, announcements, and registrations.
- Maintained and updated the site's content and features across the term, keeping information current and consistent.
- Planned and executed technical events end to end, coordinating logistics and teams for smooth attendee experiences.

Projects:

Voice AI Platform - Real-Time Conversational AI for Telephony (Livlong 365)

Tech: Go, WebSocket, OpenAI, Sarvam AI, Tata Tele Smartflo, Twilio, React, Docker

- Built a production-grade voice agent for live phone calls, with barge-in, silence, and turn detection across multiple Indian languages in a full-duplex audio pipeline.
- Integrated two telephony providers (Tata Tele Smartflo and Twilio), switchable from the dashboard for testing and comparison.
- Developed a React admin dashboard with authentication and role-based access control to securely manage API keys (OpenAI, Sarvam AI, Tata Tele Smartflo, Twilio) and add or rotate them without touching code.

- Implemented a YAML-driven script engine, editable live from the dashboard, so conversation flows can be updated dynamically without code changes.

BRD Chat - AI-Powered Requirements Discussion & Wireframe

Tech: Python, FastAPI, Claude API, Qwen-Coder 3B, Phi-4-mini, React, TypeScript, WebSocket, SQLite

- Engineered a Generative AI assistant combining real-time discussion with automated HTML wireframe generation via WebSocket.
- Implemented a multi-agent Manager-Worker pipeline utilizing Claude for layout planning and local Qwen-Coder 3B workers for section generation, reducing API token usage by ~50%.
- Optimized costs with a smart model router and RAG-based semantic search (MiniLM embeddings) to direct queries to a local Phi-4-mini SLM.

Resolvio - User Feedback and Complaint Analysis

Tech: AI/ML, Python, Flask, HTML, CSS, JS, Bootstrap

- Developed a public sanitation maintenance platform analyzing user feedback, sentiment, and images using NLP and CNNs.
- Engineered an objective rating system to prioritize facility repairs and provide actionable insights.

Healix

Tech: Web Scraping, Deep Learning, Flask, EDA, Python

- Built a deep learning and web scraping tool to analyze electronic health records and mitigate hospital readmissions.
- Implemented features mapping symptoms to diseases, generating drug suggestions, and enabling real-time patient monitoring for doctors.

Skills:

Languages: Python, TypeScript, JavaScript, Java

Frontend: React, Next.js, Remix, Angular, Ionic, React Router, React Native, TanStack Router, HTML, CSS, Tailwind, Bootstrap

Backend & APIs: Node.js, Express.js, Hono, FastAPI, Flask, Django, REST APIs, WebSocket, Authentication, Role-Based Access Control (RBAC), Twilio, Tata Tele Smartflo

AI / ML: Generative AI, AI Agents, LLMs, SLMs, RAG, Embeddings, OpenAI API, Claude API, Gemini, Sarvam AI (STT/TTS), ElevenLabs, LiveKit, Speech-to-Text, Text-to-Speech, Prompt Engineering

Databases: PostgreSQL, MySQL, MongoDB, SQLite, Firebase

DevOps & Tools: Docker, Git, GitHub, CI/CD, Cursor, Claude Code, GitHub Copilot, Google Antigravity, ChatGPT

Education:

B.E in Information Technology | V. E. S. I. T., Chembur | CGPA: 9.51 | Mar 2024

Honors and Achievements:

- Honored with Spotlight Award at Livlong 365 (2025).
- Invited as a Judge for an AI/ML and Sustainable Technology Hackathon, evaluating innovative solutions and mentoring participating teams (2026).
- Honored with Emerging Performer Award at Livlong 365 (2024).