Amit Rajegaonkar

Embedded & IoT Engineer • Smart India Hackathon 2024 National Winner • Founder, Amarklab
Khopoli, Maharashtra | +91 73509 11139 | amitrajegaonkar@gmail.com
linkedin.com/in/amitrajegaonkar | github.com/YOUR-USERNAME

SUMMARY

I build hardware products that real people use. Firmware, PCB design, mechanical enclosures, backend — all of it, by myself. SIH 2024 National Winner. Shipped 20+ orders through Amarklab. Deployed embedded systems for MP Police. Looking to bring this end-to-end builder instinct to a team building something hard.

SKILLS

Languages: C, C++, Python, JavaScript, Embedded C

Embedded / Firmware: ESP32, RP2040, Raspberry Pi, FreeRTOS, RTOS, I2C, SPI, UART, MQTT, PlatformIO

Hardware / PCB: KiCad, EasyEDA, Fusion 360, Schematic & PCB Design, 3D Printing

Software / Tools: Node.js, Git, REST APIs, OpenCV, Cloud Connectivity

EXPERIENCE

Amarklab, Mumbai *June 2025 – Present*

Product Engineer & Founder

- Design and ship a workflow device end-to-end, owning firmware, mechanical design, manufacturing, and delivery.
- Fulfilled 20+ paid orders as sole founder, generating the company's first revenue.
- Grew product presence to 900+ Instagram followers and 126K+ total content views.

MP Police (Project), Bhopal *December 2024 – March 2025*

Embedded Systems Developer

- Engineered a face-recognition system for Madhya Pradesh Police using Raspberry Pi and OpenCV.
- Built a complete prototype (face detection, recognition, and hardware integration) to production-ready status, validated in a live demonstration to MP Police officials.
- Managed all phases from hardware selection to final demonstration.

Vishwaniketan Institute (Project), Khopoli *February 2024 – November 2024*

IoT Developer

- Developed and deployed an RFID-based institute management system using ESP32 and RFID modules with a Node.js backend and real-time dashboard.
- Executed full setup including on-site hardware installation and software deployment, taking the project from prototype to live deployment.

PROJECTS

DIY FDM 3D Printer — *Stack: RAMPS 1.4, Klipper, Raspberry Pi, Fusion 360, C*

- Built a custom FDM 3D printer from scratch to cut manufacturing costs; independently designed, wired, assembled, and calibrated it. Still prints Amarklab product parts today.

Smart Mall Navigation Assistant — *Stack: ESP32, Gemini API, Node.js, Python*

- Built a hardware device (end-to-end hardware + software) that guides shoppers to products and recommends items by preference, reducing navigation time in large retail spaces.

AWARDS & HONORS

- Smart India Hackathon 2024 — National Winner
- Vishwaniketan Advanced IoT VAP — 1st Prize
- Vishwaniketan Raspberry Pi VAP — 2nd Prize

EDUCATION

Vishwaniketan's iMEET, Khopoli *Expected June 2027*

B.Tech, Computer Science & Engineering (AI & ML)

Kendriya Vidyalaya, Solapur *2023*

Higher Secondary (PCM + CS) — Top 10% of class; House Captain (led 200+ students)

CERTIFICATIONS & LANGUAGES

Certifications: Software Engineering Basics for Embedded Systems

Languages: English (Advanced), Hindi (Native)