

Amir Zakaria

[+91 9892977581](tel:+919892977581) / amir@zakarias.in / linkedin.com/in/amir-zak / zakarias.in

EDUCATION

Bachelor of Technology in Electronics and Telecommunication - VJTI

Aug. 2021 – May 2025

EXPERIENCE

A. Product Engineer - Saarthi Finance

Oct 2025 – Present

- **Founding Product Engineer** - Web — stood up the Next.js stack and the **staging / UAT / production** environments with managing the **frontend DevOps** that Pravesh, MySaarthi, Connector, and SCM still run on.
- Built Saarthi's **Loan Origination System** - CAS, Underwriting, Decisioning, Disbursement, & **External Loan Origination**. Developed frontend for internal auth: **Central Access Management System**, several internal **ops products**: Incentive IQ, Inventory Management, Data Collection, Telecaller, Branch IQ, Deviations, Email Services, Employee Off-boarding & Onboarding, and Public Facing Website - **Frontend, Backend, & Integration**.
- **Platform primitives** — BFF, SSO/OIDC, OTP, encrypted cookie sessions (HttpOnly, SameSite, chunked tokens), CSRF, CORS, preflight, token refresh, Nginx, Docker, CI/CD promotion (staging → UAT → prod), background workers.
- **Tech Stacks** — Next.js, React, TypeScript, Tailwind, Radix UI, Django, Python, APIs, Django REST views, Celery workers, Docker, GitHub Actions, HTML, CSS, JavaScript, Nginx. **Review gate** — **950+ PR's authored, 500+ PR's reviewed** (10/10/26)

B. Electronics Mentor - The Innovation Story (Oct 2025 – Dec 2025) – Robotic's and Hardware development training

C. Security Research Scholar - CoE CNDS (March 2022 – Oct 2025) – Reverse Engineering, Backend & API Security, OS- Security, IoT & Drone Security, Cryptographic Implementation, Device & Network Reliability Analysis

D. Math Model Trainer - Outlier (Nov 2024 – Oct 2025) – Chain-of-Thought Reasoning, Hallucination Correction

E. IoT Engineer - Dataviv Technologies (June 2024 – Nov 2024) – Hardware Dev - PCB Design and Assembly, Wireless Communication (LAN & WLAN), Real-Time Web Interfaces, Embedded Linux, System Deployment & Optimization

PROJECTS

Whip | Next.js, TypeScript, Django, LangGraph, Celery, PostgreSQL, Azure OpenAI, Tailwind CSS |

- Built a full-stack autonomous coding harness that turns a product request into a planned, gated, human-reviewed codebase instead of a single chat reply. Two-council design: a planner that never writes files, and a native ReAct worker fleet that edits in a sandboxed tree under per-agent write scopes.
- Mechanical gates (syntax, RBAC, compile, tests) fail closed; an LLM reviewer fails open; GitHub is PR-only with no merge from the product. Workspace cockpit with live preview, run trace (model + reasoning effort per attempt), and stack-aware rules across 27 frameworks.
- Platform Features: Invite-only access, per-user token quotas, prompt caching on Azure Responses, web research with source attribution, Docker sandboxed shell.

WhipGuard | Next.js, TypeScript, FastAPI, PostgreSQL, Playwright, Azure OpenAI, Docker, Tailwind CSS |

- Built an AI bug council that watches a connected repository, raises real GitHub issues, and ships a verified patch only after a human approves. Findings are scored by mechanical detectors (Playwright, axe-core, test runners, secret scan) rather than a model grading its own homework; the same detector re-runs on the patched tree before approval.
- Approved diffs are hash-pinned and pushed as-is (never regenerated); a draft PR deploys to a Cloudflare preview and a cross-app checker fails closed if GitHub, Slack, and the dashboard disagree.
- Never merges. Counsel is a read-only analyst and cannot approve. Admin Features: Orgs, invites, seniority routing, usage, kill switch. Operator Features: Scan categories (UI, a11y, backend, security, performance, docs), approve/reject from dashboard, Slack, or signed email.

TECHNICAL SKILLS

Programming: Python, JavaScript, TypeScript, C++, Bash, PHP

Development: RESTful APIs, Microservices Architecture, Design Patterns, Integration Testing, Optimization, Caching

Frameworks: React.js, Next.js, Express.js, Flask, Django

Databases & Infra: MySQL, MongoDB, Docker, Kubernetes, CI/CD, Deployment, Linux Servers

OS & Networking: Windows, Linux, File Systems, TCP/IP, DNS, SSL

Security: Penetration Testing, Vulnerability Assessment, Secure Coding Practices, Security Architecture

Other Tools: Cursor, Claude, Codex, Git, Postman, Firebase, GCP, Azure, AWS

ACHIEVEMENTS & PATENTS

International: Winner of UNESCO India-Africa International Hackathon '22, Endorsed by Microsoft Founders Hub

National: Winner of Smart India Hackathon 2022, 2023, 2024 (Hardware), Yukti Innovation Challenge winner.

State & Intercollege: 7x Intercollege Hackathons & Ideation Competitions

Patents : 2x Hardware Innovation Patents