Arpit Walia

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Summary

AI-native software engineer (CGPA 8.52) with a "Make It Happen" mindset who uses GenAI and Claude Code across the full SDLC, from 0-to-1 prototyping to testing and deployment. Built generative media pipelines at Samsung R&D (35% lower latency), shipped 5 production platforms at Origin Studios, and co-built a live LLM workflow app.

Education

Thapar Institute of Engineering and Technology **Sept 2023 – Aug 2027**
B.E. Computer Science & Engineering (Information Science & Data) — CGPA: 8.52 / 10 *Patiala, India*

Skills & Core Competencies

AI-First & GenAI SDLC: Claude Code (AI-Orchestrated Engineering Loops), LLM Orchestration & Agentic Workflows, Prompt Engineering, AI-Assisted Code Synthesis, Automated Testing & Debugging, Rapid 0-to-1 Prototyping.
Languages & Full-Stack: Python, TypeScript, JavaScript (ES6+), SQL (PostgreSQL), React, Next.js, Node.js, Express.js, FastAPI, RESTful APIs, Webhooks, HTML5/CSS3.
Infrastructure & Tooling: Docker, Microservices Architecture, PostgreSQL Schema Design, Supabase, Git/GitHub, Linux/Unix CLI, Postman, Relational State Modeling.
Core Computer Science: Object-Oriented Programming (OOP), Data Structures & Algorithms (DSA), Database Management Systems (DBMS), Operating Systems.

Professional Experience

Origin Studios **2025 – Present**
Co-Founder & Lead Software Engineer (originstudios.dev) *Remote*

- Shipped 5 production web platforms including e-commerce and client-facing AI solutions from concept to deployment, owning full-stack architecture across React/Next.js frontends and Node.js microservices.
- Embedded an AI-First SDLC—orchestrating Claude Code for code generation, test scaffolding, and continuous refactoring, cutting delivery cycles by 50%.
- Enforced an agile 8-week delivery framework (discovery, MVP prototype, build, ship), eliminating scope creep and ensuring 100% on-time milestone delivery.

Samsung R&D Institute India (Samsung PRISM) **June – Oct 2025**
Software Engineering Intern — GenAI Systems & Performance Optimization *Remote*

- Built a privacy-focused generative content platform enabling creators to upload video assets, generate realistic synthetic AI faces, and execute identity swaps to protect against misuse.
- Refactored the core pipeline from an initial ComfyUI setup to a unified Face Fusion architecture, significantly improving face-swap fidelity and processing stability.
- Structured asynchronous Python worker routines and modular API endpoints to process high-volume video frames without memory degradation, reducing latency by 35%; zero production defects over 4 months.

Selected Projects

Pipeline — Factory Operations & Order Management System | *Node.js, PostgreSQL, REST APIs* **2025**

- Built an internal operations platform for an ERW pipe factory to manage orders, inventory, and payments, with orders placed via WhatsApp and a dedicated app, replacing error-prone manual registers.
- Engineered an automated SQL state machine in PostgreSQL featuring transactional order consistency, automated payment reminders, and real-time expense tracking, reducing reconciliation overhead by 40%.

Ru — Event-Driven Real-Time Platform | *Next.js, Supabase, LLM APIs, Webhooks* **2025 – Present**

- Co-developed a live, production-deployed application converting natural language inputs into automated multi-API calendar, task, and reminder workflows via agentic AI orchestration.
- Built resilient error-handling, payload parsing, and tool-selection logic using Claude Code, ensuring dependable asynchronous execution across external service endpoints.

Leadership

- **Microsoft Learn Student Chapter, TIET — Management Lead:** workshops for 500+ participants; INR 2L+ budget. **Girl Up (UN Foundation) — Management Head:** led a 50-person team reaching 1,000+ beneficiaries.
- **Mudra & FAPS, TIET — Management Lead:** events of 1,500+ attendees. **Endurance:** training for Ironman 70.3.