

NAMAN GOYAL

Software Engineer & Polyglot Developer

+91 7009341649 [✉ namangoyaldev@gmail.com](mailto:namangoyaldev@gmail.com) [🌐 linkedin.com/in/naman-goyal-dev](https://www.linkedin.com/in/naman-goyal-dev) [🐙 github.com/NamanGoyalK](https://github.com/NamanGoyalK) [📁 Portfolio](#)

SUMMARY

Product-Focused Software Engineer & B.Tech CSE student at VIT Vellore. Active upstream contributor to core Google toolchains (`dart-lang` and `flutter/flutter` engine). Executed complex architectural optimizations, including a 30x data-layer latency reduction and engineering 11+ applications serving 1,400+ active users.

TECHNICAL SKILLS

- **Languages:** C/C++, Dart, Python, Java, JavaScript, TypeScript, HTML/CSS, Bash, Shell, SQL, Assembly, YAML, Go.
- **Systems & DevOps:** Linux (6+ Years), Docker, Git/GitHub, CI/CD (GitHub Actions), Postman, cURL, Network Protocols.
- **Backend & Cloud:** Google Cloud, AWS, Firebase, Supabase, RESTful APIs, Redis, Node.js, Django, Prisma, PostgreSQL, Distributed Architecture, Go (Echo).
- **Application Frameworks:** Flutter, React Native, BLoC, Riverpod, WebRTC, Multi-threaded UI, Clean Architecture Patterns.

PROFESSIONAL EXPERIENCE

Software Engineering Team Lead & Intern - AiToXr IT Services

Jun 2025 - Nov 2025

- Promoted to Engineering Team Lead within 3 months; architected the systems overhaul of the flagship app, reducing data-layer transmission latency from 60 seconds to 2 seconds (30x performance leap).
- Designed and executed a deterministic offline-first data caching layer, optimizing network thread transactions and slashing active API overhead from 70 to 5 calls per session.
- Engineered a secure real-time communications engine utilizing multi-threaded WebRTC protocols and synchronized signaling infrastructure via Supabase.

App Developer Intern - Vellore Institute of Technology (On-site) - Geetha LLC

Dec 2024 - Jan 2025

- Built authentication flow and main screen with Riverpod state management; contributed features to core repository.
- Optimized state management logic to minimize widget rebuilds, improving UI responsiveness on low-end devices.

PROJECTS & OPEN SOURCE

- **Core Language & Framework Contributor (Google Ecosystem):** Deeply involved in upstream optimization for the core `dart-lang` and `flutter/flutter` ecosystems. Engineered robust search-indexing algorithms and state-synchronization capabilities for engine developer tools. Debugged and patched core CLI positional argument validation errors, earning a featured mention in Google's official **Flutter Notable Commits**. [GitHub PRs](#)
- **Custom OS Architecture & Automation Infrastructure:** 6+ years configuring highly optimized Linux desktop operating environments. Engineered a custom, lightweight Wayland/Hyprland window management pipeline from bare configurations. Developed a native **System-Level AI Assistant** written entirely in concurrent Bash scripts, routing display server pipelines into the Gemini API for system-wide OCR context parsing and automated network auto-auth. [GitHub](#)
- **VIT Research Portal:** Architected the official institutional research discovery platform for Vellore Institute of Technology. Engineered a decoupled Node.js/TypeScript REST API backed by a PostgreSQL database and Prisma ORM. Implemented dynamic CORS, rate-limiting, and an offline-first Redis caching layer with instant invalidation, ensuring instantaneous read speeds at university scale. [Certificate](#)
- **ViFi:** Network performance exploration application mapping physical campus internet speeds room-by-room (Ping, Jitter, throughput metrics). Architected with real-time geospatial heatmaps, building relational data comparisons, GPS telemetry auto-tagging, and high-concurrency leaderboards; achieved 950+ active users. [Play Store](#)
- **Huddle:** Distributed roommate sync platform utilizing low-latency Firebase Cloud Messaging for asynchronous status updates, customized thread flags, and real-time push engines; scaled organically to 450+ production users. [Play Store](#) | [GitHub](#)
- **Chess960 FPGA [IEEE PUBLISHED]:** Engineered a deterministic Fischer Random Chess implementation on a Xilinx Zynq-7020 for secure communications. Benchmarked against pure software layouts, achieving a 2.9x improvement in operational power efficiency (0.566W) and strict clock-cycle synchronization, utilizing only 1,153 Look-Up Tables (2.17%). [GitHub](#) | [IEEE Xplore](#)

ACHIEVEMENTS & CERTIFICATIONS

- **Google Cloud Certified Associate Cloud Engineer** (Issued Aug 2026 – Exp 2029). [Credential](#)
- Solved 170+ rigorous problems on LeetCode using C++ with a high density of Medium & Hard challenges. [Leetcode Profile](#)
- Represented VIT in Smart India Hackathon 2024 & 2025; **Senior Core Member** at CodeChef-VIT & IEEE-CS VIT chapters.
- UC Irvine Go Specialization (Concurrency, Functions, Interfaces); Meta Backend Development & Version Control.
- IBM Object-Oriented Programming in Java; LinkedIn Dart Clean Code (SOLID principles). [Coursera Profile](#)

EDUCATION

Bachelor of Technology in Computer Science Engineering (Systems Track)

Vellore Institute of Technology, Vellore — 8.59 CGPA

July 2024 - Present

(Expected 2028)