

EESHAN SINGH POKHARIA

Aspiring Software Engineer — Full Stack Development

+91 8840938478 eeshan.singh53@gmail.com Portfolio LinkedIn GitHub LeetCode

Education

The LNM Institute of Information Technology (LNMIIT), India
B.Tech in Computer and Communication Engineering (CCE)

Aug 2023 – May 2027

Sheiling House School, India
ISC: 92.6%, ICSE: 96.8%

Technical Skills & Interests

Languages: C++, Python, Java, JavaScript, TypeScript, SQL
Backend: FastAPI, Node.js, Express.js, REST APIs, PostgreSQL
Frontend: React, React Native, Expo, React Query, HTML
Subjects: Low Level Design, Operating Systems, Object Oriented Programming, Computer Networks

DevTools: Cursor, VSCode, Claude, GitHub, Git, Figma
Clouds/DevOps: Azure, GCP, Docker, Terraform, GitHub Actions, CI/CD, Supabase, SQL Optimization
Tools/Concepts: SEO Optimisation, REST APIs, Generative AI, Machine Learning

Experience

UltraFit360

Oct 2025 – Present

Co-Founder and Full Stack Engineer

ultrafit360.com

- Delivered an AI fitness product end to end for **10,000+** active users on iOS and Android, owning Typescript **72 screens** and a **8K-lines** Python backend exposing **316 REST endpoints** over PostgreSQL.
- Launched a **5-agent AI coach** for meal logging and photo scoring, concurrently running agents across **37 asyncio fan-out sites**, cutting LLM spend **85%** while maintaining **sub-4s** response times.
- Developed an **875-line LLM evaluation harness**, scoring coach replies across **5 dimensions** via LLM-as-judge and **Langfuse** Tracing, integrated with GitHub Actions to block PRs below a **3.5 mean** score.
- Engineered unified **Apple HealthKit** and **Android Health Connect** sync service comprising **1,300 lines**, employing three-tier permission cache and diff-based change detection, slashing redundant writes by up to **90%**.
- Transformed user onboarding into a flexible, database-driven configuration for **11 pages** and **20 questions**, empowering flow adjustments impacting over **260 options**, and migrated from **GCP to Azure** with **Terraform**.

King's College London

Jun 2026 – Jul 2026

Project Management Intern

London, UK

- Applied **Agile, Scrum, and Kanban** methodologies to software delivery, creating a product backlog with **8 epics** and **3 user stories**, using **INVEST** and Given/When/Then formats for clarity and precision.
- Prioritised product requirement prioritization using **MoSCoW, Value vs. Effort, and RICE** frameworks, scoring features across four dimensions to inform a **10-sprint roadmap**.
- Orchestrated software delivery using a **3-column Kanban** board with a **1-item WIP** limit, reducing task bottlenecks by **50%** and accelerating cycle time.

Projects

Deepfake Detection Research – Deep Learning & Computer Vision

GitHub Repo

- Processed **7 deep learning architectures** (EfficientNet, XceptionNet, ResNet50, ViT, 3 novel designs) achieving **99.84% AUC** and **99.51% accuracy** on Celeb-DF with **39,000+** image samples using PyTorch.
- Defined a **4.2M-parameter** Multi-Scale Feature Fusion model that matched **86.6M-parameter** ViT performance — a **20x parameter reduction** while maintaining state-of-the-art detection accuracy.
- Conducted **18 ensemble configurations** (6 combinations × 3 strategies) and adversarial robustness evaluation across **5 perturbation budgets**, discovering ViT's **complete adversarial invariance** — a previously unreported finding.

Amanat – Agentic Payment Governance & Audit Trail

GitHub Repo

- Built a **36-module Python 3.11** and **FastAPI** backend with **4 REST APIs** and a **3-layer** policy engine.
- Signed all **4 rail** states with **Ed25519** and **SHA-256** into an append-only chain verified in-browser.
- Integrated **5 payment rails** and **26 capabilities** via **UPI SBMD** and **Razorpay REST API**, hitting **HTTP 400** limits.
- Wrote **205 tests** across **14 suites** with **23 attack cases**, running at **0 credentials** on **GitHub Actions**.
- Trained **conformal quantile regression** on **200,000 NYC TLC** rows for **95%** coverage, cutting gap **10×** to **+0.91pp**.
- Deployed via **Docker** on **GCP Cloud Run** with **2 swappable Gemini/Claude** backends and **Google AP2** mandates.

Manoday – AI-Powered Mental Wellness Companion

GitHub Repo

- Architected full-stack app with **React 18, TypeScript, Firebase Cloud Functions, GCP Tools** and worked on **Agentic Personal Assistant** with **OpenAI integration** for smart scheduling and **Google Calendar sync**.
- Engineered AI chatbot using **Google Gemini 2.5 Flash**, processing **10,000+** daily queries with **95%** sentiment accuracy and **multilingual (Hindi/English)** NLP support, **AES-256-GCM** encryption securing **100%** user data.
- Deployed **Vertex AI AutoML** model analyzing **10 wellness parameters** with **87%** prediction accuracy; integrated **Google Speech-to-Text** for voice journaling and **Maps Places API** to locate **2,000+** professionals across **28 Indian states**.
- Devised proprietary **Wellness Risk Index (WRI)** algorithm categorizing users into **4 risk bands** for early intervention.

Achievements

- 1st Runner Up** at Google Gen AI Exchange Hackathon.(Link)
- Top 100 Teams** at Meta PyTorch OpenEnv Hackathon x Scaler School of Technology
- Top 8%** globally on **LeetCode**, Pupil on **CodeForces**.
- Launched and Scaled **UltraFit360** to **10000+** Active Users as **Co-Founder**.