

HARSH RANJAN

Chandigarh, India | +91 9955433033 | harshranjan3648@gmail.com | github.com/harshranjan-art
Portfolio - harshranjan.vercel.app | www.linkedin.com/in/harsh-ranjan-9717b6235

Summary

Backend engineer with production internship experience shipping **Java/Spring Boot APIs** at scale; national competition winner across fintech, healthcare AI, and Web3 — spanning **microservices, distributed systems, and AI agents**. Solved **300+ LeetCode problems** (25% Hard).

Experience

Stable Money | Software Engineering Intern

Dec 2025 – Present

- Shipped **5+ production REST & gRPC APIs** in **Java, Spring Boot**; APIs serve live transaction flows on a **10M+ user platform**, owned full lifecycle from design to deployment following **SOLID** principles.
- Designed and shipped an agents portal replacing manual Excel workflows — automated referral tracking, AUM exploration, and conversion metrics; **deployed to production** and actively used daily across **400+ agents**.
- Partnered with Finance, Marketing, and Founder's Office to gather requirements and ship **10+ production dashboards** on the internal tool — serving as the primary engineering point of contact across business teams.

PGI Chandigarh | Backend Developer (*Govt. of India Collaboration*)

Oct 2025 – Dec 2025

- Built REST APIs and a data ingestion pipeline for an AI-assisted **Glaucoma & IHH detection** system; backend processed clinical imaging data achieving **75% diagnostic accuracy** in hospital trials.
- Designed infrastructure to serve medical imaging data to clinician-facing workflows, deployed within PGI under a **Government of India** collaboration.

Achievements

- **National Winner, American Express**: Ranked **1st nationally** in Campus Challenge 2025.
- **National Finalist, Smart India Hackathon**: Top **1%** of 516,000+ participants nationwide.
- **National Semi-Finalist, Flipkart GRiD 7.0**: Shortlisted from 160,000+ participants.
- **Amazon ML Summer School 2025**: Competitively selected; attended applied science sessions on Generative AI and Transformer architectures with Amazon researchers.
- **Academic Excellence**: **99th percentile** in JEE Mains; Class XII District Topper (96.4%).

Projects

DeFAI MCP — AI-Native DeFi Agent | Live | GitHub

- Unified **5+ Decentralized finance functionality** (Yield, Swaps, Arbitrage) into a single **MCP server exposing 19 typed API endpoints**; live on Railway handling testnet on-chain operations from a single interface.
- Engineered autonomous execution engine with **30s polling loop** across 3 services and 5 background monitors for real-time on-chain alerting; secured per-user credential isolation via **AES-256-GCM** encryption.

GenAI Call Agent — Appointment Booking System | GitHub

- Built an AI voice agent using **Python** and Twilio achieving **95% booking success rate**; reduced scheduling response time to under **2 seconds** via systematic prompt engineering.
- Designed conversation state machine handling edge cases (rescheduling, cancellations, ambiguous inputs); validated end-to-end via Postman and Ngrok tunneling.

Technical Skills

- **Languages**: C++, Java, Python, JavaScript, TypeScript, SQL, HTML/CSS
- **Frameworks & Web**: Spring Boot, React.js, Node.js, Next.js, Express.js, REST APIs, gRPC, Microservices
- **Databases & Tools**: PostgreSQL, MySQL, MongoDB, Redis, Postman, Git/GitHub, Pub/Sub, Kafka
- **Cloud & DevOps**: AWS (EC2, SQS, S3), Microsoft Azure, Kubernetes, Docker, Jenkins CI/CD, Grafana
- **AI & ML**: LLMs, Generative AI, LangChain, RAG, AI Agents, Model Context Protocol (MCP), Transformers
- **CS Fundamentals**: Data Structures & Algorithms, OOP, DBMS, System Design, Operating Systems, Agile/Scrum

Education

Punjab Engineering College (PEC)

B.Tech in Computer Science, CGPA: 8.01/10

Chandigarh, India

Aug 2023 – May 2027 (Expected)

Harrow English School

Class XII (CBSE): 96.4%

Darbhanga, India

Apr 2020 – May 2022