

# VAMSHI KRISHNA MARTHA

Hyderabad, India · Open to Remote

📞 9398191346 | ✉ [m.v.krishnaa@gmail.com](mailto:m.v.krishnaa@gmail.com) | [in linkedin.com/in/krishna-mv-38380a2b3](https://www.linkedin.com/in/krishna-mv-38380a2b3) | [github.com/mvkrishna24](https://github.com/mvkrishna24)  
| [</> LeetCode](#)

## Technical Skills

---

**Languages:** Java, Python, JavaScript, TypeScript, SQL, HTML5, CSS3

**Backend:** Spring Boot, Spring MVC, Spring Security, OAuth 2.0, JWT, REST APIs, Hibernate/JPA, Maven, Node.js

**Databases:** PostgreSQL, MySQL, Redis

**Frontend:** React, Next.js, Tailwind CSS

**AI / Automation:** OpenAI API, Gemini API, n8n, LangChain, RAG Pipelines

**DevOps:** Docker, GitHub Actions (CI/CD)

**Tools:** Git, Postman, Swagger/OpenAPI, IntelliJ IDEA, VS Code

**Concepts:** Microservices, Caching, Rate Limiting, Database Indexing, API Design, System Design

## Projects

---

**MetroNexis** | *Java 21, Spring Boot 3, PostgreSQL 16, Redis 7, React Native, TypeScript, Docker* | [GitHub](#) · [Live2024](#) – **Pr**

- Engineered offline-first BFS/Dijkstra routing across a 290-station, 12-line metro graph with interchange penalty modeling; JWT + RBAC secured Spring Boot 3 backend with Redis TTL caching (4 key patterns, city-scoped invalidation) and Swagger/OpenAPI docs deployed via GitHub Actions CI/CD to Railway.
- Designed 3-tier network awareness (online/degraded/offline) with MMKV stale-while-revalidate caching and 1.5s timeout recovery; modeled 13-table PostgreSQL schema across 18 Flyway migrations with 152+ automated tests.

**Distributed URL Shortener** | *Java 17, Spring Boot 3, PostgreSQL 16, Redis 7, GitHub Actions* | [GitHub](#) · [Live2025](#) – **Pr**

- Sustains **100 RPS at 4.13ms p99** redirect latency; Base62 batch ID generation via PostgreSQL sequences (1,000-ID blocks per instance) eliminates per-request DB round-trips using `AtomicLong` dispensing.
- Achieves **99.98% Redis cache hit rate** (6,019/6,020 benchmark lookups); atomic sliding-window rate limiter via Redis Lua script (100/1,000 req/min two-tier quotas) with graceful PostgreSQL fallback on Redis failure.

**LeadOps AI CRM** | *n8n, Google Gemini API, Apps Script, Gmail SMTP, Google Sheets API* | [GitHub](#) **2026**

- Built event-driven AI lead qualification pipeline: Google Form submission triggers Apps Script webhook → n8n → Gemini API chain (lead scoring 1–10, pain-point analysis, personalized email generation) → automated Gmail dispatch — lead to inbox in **under 10 seconds**.
- Engineered conditional Hot/Warm/Cold routing with concurrent sales-alert delivery and structured CRM record persistence (score, category, AI copy, timestamp) to Google Sheets; validated end-to-end with live form submissions in production.

## Experience

---

**Freelance Full-Stack Developer & AI Automation Consultant**

**Jan 2025 – Present**

*Independent — 5+ Client Projects*

*Remote, India*

- Building production websites for 3 clients across architecture, hospitality, and education verticals using Next.js 15, GSAP ScrollTrigger, Tailwind CSS v4, Clerk auth, Turso, and Vercel.
- Deployed LeadOps AI CRM to a local business client — n8n + Gemini API pipeline automating lead qualification and outreach, reducing manual follow-up to zero.

## Education

---

**Sanskriti University, Uttar Pradesh**

**Sep 2023 – May 2027**

*B.Tech in Computer Science (Artificial Intelligence & Machine Learning)*

*CGPA: 8.01/10*

## Achievements

---

- Won university startup pitch competition with MetroNexis; judges recommended patent filing and identified the project as fundable — patent application in progress.
- Secured first paid freelance contract in 3rd year of B.Tech — independently delivering production websites and AI automation tools for 5+ real business clients.
- 297 submissions on LeetCode with 3 badges — consistent DSA practice targeting data structures, algorithms, and problem-solving depth.
- Organized AI & Web Development workshops for 50+ students at University covering React.js, Spring Boot, and Generative AI tooling.