

# M.V. HARISH KUMAR

Full-Stack Developer & Systems Programmer

Chennai, Tamil Nadu, India | harishtpj@gmail.com | +91 9940559664  
[linkedin.com/in/harishtpj](https://www.linkedin.com/in/harishtpj) | [github.com/harishtpj](https://github.com/harishtpj) | [harishtpj.netlify.app](https://harishtpj.netlify.app)

## PROFESSIONAL SUMMARY

Full-stack developer and systems programmer with programming experience since 2017 and a 9.49 CGPA second-year Computer Science student at VIT Chennai. Built a custom DBMS engine, an operating system kernel, and multiple network programs from scratch. Proficient across 20+ programming languages spanning systems programming, compiler design, web development, networking, and AI/ML.

## EDUCATION

**B.Tech, Computer Science & Engineering — Vellore Institute of Technology, Chennai** 2025 – Present  
CGPA: 9.49/10 (Second Year)

**CBSE Grade 12 — Velammal New Gen School, Surapet** 2025  
492/500 (98.4%) | Computer Science: 100, Chemistry: 100, Mathematics: 99, Physics: 98, English: 95 | JEE Main: 95.187 percentile

**CBSE Grade 10 — Velammal New Gen School, Madhavaram** 2023  
471/500 (94.2%) | Tamil: 100, Mathematics: 98, Social Science: 95, Science: 94, English: 84

## TECHNICAL SKILLS

- **Core Languages:** C, C++, Python, Java, Go, Rust
- **Web Development:** HTML5, CSS3, JavaScript, TypeScript, PHP, REST APIs, React, Vue, Django, Rails, Laravel, Flask, FastAPI
- **Databases:** Oracle, MySQL, PostgreSQL, SQLite, MongoDB, Redis
- **Systems & Hardware:** RISC, IBM Power processor, x86/x64 Assembly, Linux/Unix, Arduino, Microbit, ESP32, OS Development, Kernel Programming, Embedded Systems
- **AI & Machine Learning:** PyTorch, TensorFlow, Keras, Scikit-learn, LangChain, LLMs, Federated Learning, Computer Vision, NLP
- **Networking:** Socket Programming, DNS/SMTP/FTP Protocols, VLAN, VPN, Firewall Configuration,
- **Tools & Platforms:** Git/GitHub, Docker, AWS, VMware, Make, Compiler Design
- **Additional Languages:** Ruby, Perl, Lua, Bash, Haskell, Erlang, Elixir, Prolog, LISP, R, Julia, Qiskit, Kotlin, C#, Ada, Fortran, COBOL

## KEY PROJECTS

**AutoREST — Automated API Generator** Ruby

- Built a database-agnostic RESTful API generator, supporting route scaffolding and multiple database access.
- [github.com/harishtpj/AutoREST](https://github.com/harishtpj/AutoREST)

**IndianSQL — Custom DBMS Engine** Go

- Designed and built a file-based database engine from scratch, supporting full CRUD operations and SQL query execution.
- Implemented B-tree page navigation, varint parsing, and a layered storage engine architecture; targets the MySQL wire protocol for network access.
- [github.com/harishtpj/IndianSQL](https://github.com/harishtpj/IndianSQL)

**MKS — Minimal Kernel System** C & x86 Assembly

- Built a CLI-based operating system kernel from scratch, implementing memory management and system calls.
- [github.com/harishtpj/MKS](https://github.com/harishtpj/MKS)

**ResumeCanvas — AI Portfolio Generator** PostgreSQL, Laravel, Vue.js, TailwindCSS

- Created a full stack, modern web application featuring GenAI capabilities for dynamic portfolio generation.
- [github.com/harishtpj/SilkLang](https://github.com/harishtpj/SilkLang)

**MiME — Mail Server System** C

- Implemented a custom SMTP server supporting basic mail transfer and user authentication functionalities.
- [github.com/harishtpj/Mime](https://github.com/harishtpj/Mime)

## CERTIFICATIONS

- Introduction to Programming with R — CS50, Harvard University
- Typewriting English Junior Grade (30 WPM), First Class with Distinction — Government of Tamil Nadu
- AWS Educate: Introduction to Generative AI | C++ Essentials 1 — Cisco

## ADDITIONAL INFORMATION

- Languages Known: English, Tamil (native)