KRISHNA CHAMARTHY

Pune, India • +91 9766909863 • chamarthysr@gmail.com • GitHub • Linkedin • Portfolio

SUMMARY

As a **Computer Engineering undergraduate** specializing in **full-stack development**, **machine learning**, and **distributed systems,** I am a driven and **results-oriented** individual with a strong track record of high achievement. Proficient in Python, C++, and Java, I have hands-on experience in building **scalable** and **efficient** applications. I am eager to contribute my technical expertise and leadership skills, while aiming to deliver innovative, impactful solutions.

EDUCATION

Dr. Vishwanath Karad MIT World Peace University, Pune, India — August 2022 - May 2026
Bachelor of Technology in Computer Science and Engineering
CGPA: 8.73/10 - MIT WPU Merit Scholarship holder for 3 consecutive years

Relevant Coursework - Data Structures and Algorithms, Operating Systems, Database Management Systems, Computer Networks, Machine Learning, Distributed and Cloud Computing, Theory of Computation, System Design.

SKILLS

Technical Skills:

- **Languages:** Python, C++, C, HTML, CSS, JavaScript, SQL, Java
- **Frameworks & Libraries:** React, Node.js, Flask, Pandas, NumPy, Scikit-learn, PyTorch, Spring Boot
- **Data Platforms:** MongoDB, MySQL, PostgreSQL, Azure Data Factory, Snowflake
- **Tools & Platforms:** Git, Docker, Microsoft Azure, AWS, Unix/Linux
- **Machine Learning:** Regression, Classification, Model Training, Data Visualization, LLMs

Soft Skills: Attention to detail, Clear communication, Effective teamwork, Time management, Quick adaptability

PROFESSIONAL EXPERIENCE

Software Engineer Intern — June 2025 – Nov 2025

Northern Trust Corporation – Pune, India

- **Spearheaded the design and development** of a user data flow monitoring system from **legacy systems** via **Snowflake** to **Azure Cosmos DB**, ensuring full traceability across stages.
- Developed a **scalable Spring Boot backend** for tracking data states and a **React-based dashboard** for visualizing data flow and processing stages across **Snowflake** and **Azure Cosmos DB**.
- Implemented structured **audit logging** and **role-based access controls**, increasing audit log completeness by **24%** (from 76% to 94%) and **eliminating unauthorized access incidents**.

Technical Team Member - Student Club — Sept 2023 – Feb 2024

Google Developer Student Clubs, MIT-WPU - Pune, India

- Mentored **70+ junior developers** in **coding best practices** through **hands-on sessions**, and contributed to key modules for **university hackathon**s and **workshops** to promote innovation.

PROJECTS

RepoScope - Intelligent Codebase Explorer - React, Node.js, Postgres, API, Docker — **GitHub**

- Engineered a code exploration platform using **React**, **Node.js**, and **PostgreSQL** with **FTS5** full-text search, enabling efficient information retrieval across **multi-language codebases** containing **10,000+ files.**
- Containerized the application using **Linux-based Docker environment**s for consistent deployment and scalable backend processing.
- Accomplished accurate semantic code search **(92% relevance score**) as measured by a benchmark of **50** (46/50) **manually verified queries**, by integrating **Ollama models** with custom embedding-based retrieval algorithms.

CampusCore - College Management System - React, Node.js, MongoDB — **GitHub**

- Built a **full-stack college management system** with **10+ integrated modules** including student records, timetables, assignments, and faculty dashboards. Reduced API response times to **under 200ms** on average by implementing scalable **Node.js** microservices architecture, along with **React** and **MongoDB**.
- Accomplished **4x faster academic reporting** as measured during review cycles, by implementing **role-based access**, **dynamic dashboards**, and **automated report generation**.

Exoplanet Detection and Classification (Published arXiv) - Python — **GitHub, Paper**

- Improved an existing ML-based system for detecting and classifying exoplanets by **implementing k-fold cross-validation**, **optimizing model architecture**, and **tuning hyperparameters** using grid search.
- The enhanced system achieved **99.5% accuracy** and reduced false positive rate from **8.3%** to **7.1%** on the Kepler dataset containing **150,000+ stellar observations**.

ACHIEVEMENTS

- Secured **1st Runner-Up position** at **HACKMIT 2025,** hosted by MIT World Peace University.
- **Finalist - HackIndia, 2025** - Hyderabad
- Achieved **1800+(Knight)** rating on **LeetCode, 1500+ (Specialist)** rating on **Codeforce**s.