

RANJITHA NARASIMHAMURTHY

Software Engineer | Machine Learning Developer | NLP & Cloud Enthusiast

California(open to relocate) | rnara016@ucr.edu | +1(951) 347 3226 | www.linkedin.com/in/ranjitha-n14 | Portfolio | GitHub

Master's student in Computer Science at UC Riverside with 1.5+ years of professional experience in software development, backend systems, and cloud infrastructure. Skilled in building intelligent, scalable systems using Generative AI, LLMs, and cloud-native/serverless architectures with experience in HuggingFace Transformers, BERT, and AWS Lambda. Seeking impactful roles in ML Engineering or Software Engineering.

EDUCATION

University of California Riverside, California, USA

Sep 2024 – Dec 2025

Master of Science in Computer Science

- **Academic Role:** Grader for CS 141 – Intermediate Data Structures and Algorithms (Summer 2025)
- **Coursework:** AI, ML, Compilers, Big Data, Information Retrieval, Algorithms, Data Mining, Spatial Computing

Visvesvaraya Technological University, Bengaluru, Karnataka, India

Aug 2019 – Jun 2023

Bachelor of Engineering in Computer Science

- **Coursework:** DSA, DAA, CO, Web Technology, Software Engineering, OS, DBMS, Computer Networks, Unix

TECHNICAL SKILLS

Languages: Python, Java, C++ , C, C#, JavaScript, SQL, HTML, CSS, PHP

Frameworks/Libraries: .NET, Spring Boot, React.js, Flask, OpenCV, HuggingFace Transformers, PyTorch, TensorFlow

Cloud/Big Data: AWS, Azure, Apache Spark, DynamoDB, GeoPandas, QGIS

ML/AI: Generative AI, LLMs, Adapter Tuning, BERT, Diffusion Models, Transformers, FAISS, VAE, GAN

Tools & Processes: GitHub Actions CI/CD, Docker, Postman, Unit Testing, Agile/Scrum, Git, Microservices Architecture

Operating Systems: Linux, Unix, Windows

EXPERIENCE

Software Engineer, ThoughtClan Technologies Private Limited, Bengaluru, India

Jul 2023 – Jun 2024

- Developed backend solutions using ASP.NET Web Forms, MVC, Web API, and .NET MAUI; implemented OAuth2.0 authentication, containerized services with Docker, and used Firebase real-time DB for secure role-based access.
- Worked on the Cart component of .NET MAUI E-commerce App with role-based views and offline order support.
- Migrated a legacy .NET Framework application to Angular, refactoring Web API endpoints, integrating OAuth security, and deploying to Firebase Hosting.
- Redesigned SQL schemas and indexing strategy, improving database query efficiency by 25%, leading to a 15% drop in API latency, and implemented CI pipelines for Postman and Selenium tests.

Software Engineer Intern, ThoughtClan Technologies Private Limited

Feb 2023 – Apr 2023

- Performed requirement analysis and configured Spring Boot, MySQL, Node.js, and IDEs to accelerate development.
- Built and validated a Spring Boot backend with services and controllers; tested endpoints for 200+ users via Postman.
- Developed React.js booking and admin components; secured them with Firebase JWT authentication.
- Collaborated in agile sprints using Git for version control and refined features based on stakeholder feedback.

Full Stack Intern, Varcons Technologies Private Limited, Bengaluru, India

Aug 2022 – Sep 2022

- Conceptualized and developed a Car Service Management Platform to enhance user engagement and efficiency.
- Designed responsive web pages with databases, improving data management by 20%.

RELEVANT PROJECTS

Reddit Hybrid Search Engine | PyLucene, BERT, Flask | GitHub

- Built a PyLucene-BERT+FAISS search service with Flask APIs delivering latency under 50ms.
- Created a PRAW-based crawler that ingests Reddit data in 10 MB chunks.
- Implemented GitHub Actions pipelines for automated builds and tests.

Compiler Optimization with LLVM | LLVM, C++ , Static Analysis | GitHub

- Wrote LLVM passes in C++ for constant propagation and SSA optimizations, boosting performance by 30 %.
- Built a test harness to convert C to LLVM IR and test passes on 100+ programs.

Scalable Task Scheduler | AWS Lambda, DynamoDB

- Designed a serverless task queue using AWS Lambda, API Gateway, and DynamoDB for fast, asynchronous scheduling.
- Secured RESTful APIs and integrated CloudWatch for logging and monitoring, achieving 99.9% uptime.