

RANJITHA NARASIMHAMURTHY

Software Engineer | Backend Developer | Cloud Enthusiast

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Master's student in Computer Science at UC Riverside with 1.5 years of professional software development experience. Seeking a Software Engineering intern role to contribute to building scalable, efficient, and robust software solutions.

EDUCATION

University of California Riverside, California, USA

Sep 2024 – Dec 2025

Master of Science in Computer Science

- **Coursework:** Artificial Intelligence, Compiler Construction, Big Data Management, Information Retrieval, Design and Analysis of Algorithms, Foundations of Machine Learning, Data Mining Techniques, 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/Tools: .NET, Spring Boot, React.js, Flask, OpenCV, OpenGL, PowerApps, SSRS, Git, Docker, CI/CD, Postman

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

Databases: MySQL, PostgreSQL, MongoDB, PostGIS, DynamoDB

Operating Systems: Linux, Unix, Windows

EXPERIENCE

Software Engineer, ThoughtClan Technologies Private Limited, Bengaluru, India

Jul 2023 – Jun 2024

- Developed back-end solutions in the .NET Framework, MVC and the .NET Core Web API, enhancing scalability by 40% and minimizing system downtime by 25%.
- Optimized debugging for large-scale applications, reducing system crashes by 30% and enhancing performance.
- Implemented access controls to ensure data security and compliance.

Software Engineer Intern, ThoughtClan Technologies Private Limited

Feb 2023 – Apr 2023

- Engineered a Bike Rental System using Spring Boot, MySQL, and React.js, streamlining operational efficiency by 40%.
- Designed and secured RESTful APIs with JWT-based role-based access control, improving security and user experience for 500+ users while enhancing UI with React.js, increasing engagement by 30%.

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

Optimizing Retail Strategies with Big Data Analytics | Spark, Python, Scikit-learn

- Collaborated with a team of 4 to design a big data framework using K-Means, Random Forest, and Decision Trees for customer segmentation, churn prediction, and sales forecasting.
- Accelerated data processing using parallel computing for improved system performance and efficiency.

Reddit Search Engine | PyLucene, BERT, Flask

- Developed a hybrid Reddit search engine using PyLucene for keyword retrieval and BERT+FAISS for semantic search with contextual embeddings.
- Built a Flask web interface for real-time querying and comparison of NLP methods in ranking, speed, and scalability.

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

- Developed LLVM compiler passes for constant propagation and SSA-based optimizations, improving execution efficiency by 30% and refining debugging techniques for system performance.
- Collaborated on a 3-phase project, including analysis and transformation phases to enhance compiler optimizations.

Scalable Task Scheduler | AWS Lambda, DynamoDB

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