

Ankitha Suresh

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EDUCATION

University of Massachusetts, Amherst

05/2025

Master of Science in Computer Science | **GPA: 3.92/4.0**

Coursework: Algorithms for Data Science, Software Engineering, Database Design and Implementation, Machine Learning

JSS Science and Technology University, Mysore, India

05/2021

Bachelor of Computer Science and Engineering | **GPA: 9.34/10**

Coursework: DSA, Operating Systems, Computer Networks, NLP, Neural Networks, Web Technologies, Java and J2EE

SKILLS

Languages & Tools:

Python, Java, C++, JavaScript, TypeScript, SQL, Bash, Ansible, GitHub, Jira

Technologies & Databases:

React, Springboot, Flask, Next.js, Node.js, REST, GraphQL, gRPC, Docker, CI/CD
Kubernetes, Jenkins, AWS, Postman, MySQL, PostgreSQL, NoSQL, HTML, CSS
Bootstrap, Kafka, Grafana, PyTorch, Pytest

WORK EXPERIENCE

Headstarter

Software Engineer Fellow

07/2024 - 09/2024

- Developed and merged a pull request for **API integration** with Microsoft Dynamics 365 CRM, leveraging **RESTful** services to streamline data synchronization, boosting data accuracy and revamping workflow efficiency by cutting manual input by **40%**.
- Built **3+** full-stack applications in **React**, integrating **large language models (LLMs)** for AI-driven features, enhancing user engagement and application performance.
- Innovated a responsive pantry management system using **HTML, CSS, JavaScript, AWS CDK, and MySQL**, enabling efficient tracking of **1,000+** inventory items, and incorporated predictive analytics for real-time stock predictions, attained **500 Mbps** throughput via load balancing.

Hewlett Packard Enterprise, Bangalore, India

Software Development Engineer

09/2021 - 07/2023

- Optimized cloud deployment and **CI/CD** pipelines for HPE Serviceguard on **AWS**, by deploying **Docker and Kubernetes**, reducing release cycles by **75%**. Automated workflows and refactored **2,000+** lines of code to boost scalability and system reliability.
- Engineered a fault-tolerant system to migrate legacy array processes to **Kafka**, slashing downtime from **30 minutes to 4.5 minutes** and improving workload efficiency by **85%**.
- Accomplished successful development of a high-availability **cluster management API**, facilitating seamless automation of node failover. Integrated **RESTful APIs** with Serviceguard Manager, reducing manual intervention by **70%**, supporting **50+** nodes in production.
- Architected end-to-end infrastructure and application monitoring leveraging **Grafana and Elastic Stack (ELK)**, accelerating incident resolution time by **60%**.
- Spearheaded a team of interns to refine a resource allocation algorithm for **250+** nodes, introducing advanced optimization techniques and pioneered a **unit testing suite** to ensure system reliability.

Hewlett Packard Enterprise

Research and Development Engineer Intern

02/2021 - 08/2021

- Enhanced system reliability by establishing real-time database updates with **MySQL**, eliminating **90%** of manual data entry and ensuring timely, reliable data delivery to customers.
- Delivered a custom user interface simplifying manual maintenance tasks using **Ansible**, streamlining distributed system management and saving **25%** in operational costs.

PROJECTS

AlgoCards - AI Flashcards generator for DSA [\[Git\]](#)

- Implemented an AI-powered flashcard generator in **Next.js** and **React**, generating **1000+** DSA flashcards with a remarkable data throughput of **500 Mbps**, supporting real-time feedback and adaptive learning.

Buddy: Chatbot [\[Git\]](#)

- Orchestrated a high-performance chatbot in **Next.js** and **React**, utilizing **OpenAI** for natural language processing and **Pinecone** for vector-based search, achieving a response accuracy of **93%**.

Crop Yield Prediction [\[Git\]](#)

- Constructed a predictive crop yield model harnessing **gradient boosting**, with an accuracy of **86.8%** on **1M+** records, modernized infrastructure with **AWS** and **Spark** for large-scale data processing, and delivered real-time insights to **500+** farmers, strengthening agricultural decision-making and productivity.