

Ankitha Suresh

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EDUCATION

University of Massachusetts, Amherst

Expected Graduation - 05/2025

Master of Science in Computer Science | **GPA: 3.88/4.0**

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: 3.74/4.0**

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

WORK EXPERIENCE

Headstarter

SWE Fellow

07/2024 - 09/2024

- Contributed to the Panorama open-source project by developing and submitting high-quality pull requests, enhancing functionality and integrating omni-channel API software.
- Designed and implemented scalable software solutions, including API integrations and data processing pipelines, to support high-performance applications and ensure seamless user interactions.
- Innovated AI models, including a recommendation system using neural networks and a predictive analytics engine with gradient boosting, leading to a 30% increase in user engagement.

Hewlett Packard Enterprise, Bangalore, India

Software Engineer

09/2021 - 07/2023

- Spearheaded the design and deployment of custom automation scripts, integrating cloud infrastructure and optimizing resource management. Achieved an 80% reduction in deployment time and significantly improved system scalability.
- Automated workflows with Python tools, transitioning from manual, array-based processes to a system-based framework, improving workload recovery efficiency by 92% and enhancing system performance while reducing recovery times during critical failures.
- Created a high-performance utility tool to automate pre-installation operations, eliminating manual steps and reducing deployment complexity. This led to an 85% reduction in deployment time, improving project timelines and execution.
- Optimized system monitoring by creating a customized Customer Line Interface, replacing SSH-based processes and enabling more direct interaction with system components. Improved operational efficiency and control, minimizing manual overhead.
- Automated cloud infrastructure management using Python and Bash, incorporating infrastructure-as-code (IaC) principles. This reduced testing and setup times by 60%, while enhancing system scalability, resilience, and fault tolerance across platforms like AWS and Azure.

Hewlett Packard Enterprise

Research and Development Engineer Intern

02/2021 - 08/2021

- Engineered an automated support platform, integrating real-time database updates to ensure the accuracy and timeliness of data. Reduced manual data entry by 90%, enhancing operational efficiency and improving customer information delivery.
- Architected and deployed a secure automation solution for vault management, leveraging best practices in security protocols. Reduced password recovery requests while enhancing data security and streamlining overall operations.
- Delivered a custom user interface, automating 70% of manual maintenance tasks and streamlining the management of distributed systems, resulting in increased productivity and seamless operations across nodes.

PROJECTS

AlgoCards - AI Flashcards generator for DSA

07/2024 - 08/2024

- Implemented an AI-driven flashcard generator using Next.js and React, automatically generating over 150 flashcards across various DSA topics such as algorithms and data structures to aid learning and revision.
- Incorporated a real-time feedback system tool allowing users to receive instant feedback during study sessions; improved retention rates and overall engagement through personalized adjustments in flashcard challenges.

Buddy: Chatbot

06/2024 - 07/2024

- Built a high-performance chatbot using Next.js and React, integrating OpenAI for natural language processing and Pinecone for vector-based search, achieving a response accuracy of 93%.
- Integrated user authentication and feedback mechanisms to improve security and user engagement.

Crop Yield Prediction

11/2020 - 03/2021

- Generated a crop yield forecasting model using historical weather data and crop features, improving accuracy to 86.8% with advanced random forest algorithms, gradient boosting, and feature scaling in Python.

Car Make and Model Classification

08/2020 - 11/2020

- Designed a highly efficient machine learning model using CNNs to analyze car images, implementing the Inception-v3 model to achieve 92% precision in predicting car make and model for an automotive image recognition system.

SKILLS

Programming:

Java, Python, Javascript, .NET, PHP, Bash, Android Studio

DBMS:

MySQL, NoSQL, PostgreSQL

Web Development

React.js, Node.js, Next.js, HTML, CSS, REST API, GraphQL, gRPC

Machine Learning:

Pandas, LLMs, OpenAI, Keras, Numpy, Scikit-learn, MATLAB

DevOps:

Docker, CI/CD Pipelines, Ansible, Git, VSCode

Cloud:

AWS, GCP