Sai Deepthi Jammula

Hammond, Indiana | +1(219)-900-7926 | **in:** [SaiDeepthiJammula](#) | saideepthijammula@gmail.com

EDUCATION

Purdue University Northwest   **Hammond, IN**
Master of Science - Computer Science   Jan 2023 – Dec 2024
Focused Studies: Algorithms, Operation systems, Programming languages and interpreters, Artificial Intelligence, Deep Learning, Software Design.

Malla Reddy College of Engineering and Technology   **Hyderabad, India**
Bachelor of Technology in Electronics and Communication Engineering   Jun 2017 – Jun 2021
Coursework: Python, Data Structures, Database Systems, C, C++, Java

EXPERIENCE

Systems Engineer   **Hyderabad, India**
Tata Consultancy Services | Client: Ericsson   Jun 2021 – Dec 2022

- Optimized orchestration of the Toscao microservice with Kubernetes, Docker, and Helm, enhancing deployment efficiency by 20% and improving stability by 15%.
- Developed and executed over 1,000 test cases for Red Hat-based applications, improving system integrity and application performance.
- Diagnosed and resolved over 20 critical issues, providing detailed reports and achieving a 95% issue resolution rate.
- Collaborated with cross-functional teams to address and fix 15 defects, ensuring alignment with project milestones and delivery timelines.
- Utilized JIRA and Jenkins to manage over 50 test cases and defects, streamlining the development and testing process.
- Administered PostgreSQL, ensuring 100% data integrity and optimizing performance through regular updates and tuning.

Lab Assistant   **Hammond, IN**
Purdue University Northwest   Aug 2023 – May 2024

- Supported the development and delivery of 2 software engineering courses, contributing to a 20% increase in course effectiveness and student satisfaction.
- Mentored over 25 students through lab sessions, resolving technical issues and supporting their development in software design projects.
- Graded lab reports and provided feedback, enhancing students' understanding and improving performance scores by 15%.
- Directed student teams in developing 2 web applications using HTML, Java, and C#, ensuring adherence to project requirements and deadlines.

PROJECTS

Road Crack detection: **Jan 2023 – May 2023**
- Designed a detection model using VGG16, RPN, and ROI pooling, achieving 90% accuracy in identifying road cracks.
- Compiled and processed over 1,000 road images for dataset creation and utilized Google Colab for efficient model training, reducing training time by 50%.

Efficient Path Finding and Visualization: **Aug 2023 – Dec 2023**
- Implemented Prim's MST and Dijkstra's shortest path algorithms to optimize US city map navigation, decreasing processing time by 25%.
- Visualized algorithms using a comprehensive GUI, which significantly enhanced data accessibility and clarity, resulting in a 30% improvement in actionable insights.

Neo4j CRUD Rest API: **Jan 2023 – May 2023**
- Created 4 CRUD APIs using Node.js and Express.js for managing student data in a Neo4j graph database.
- Conducted 8 automated Postman tests with a 100% pass rate.

TECHNICAL SKILLS

Languages: Python, Java, C++, C, C#
Software Development: Algorithms, Data Structures, Software Design, Debugging
Tools & Technologies: Git, Jenkins, Docker, Kubernetes, JIRA, Google Colab, GitHub, Bitbucket, AWS
Web Technologies & Frameworks: HTML, CSS, React, Node.js, JavaScript, Angular, Junit, pytest
Database: PostgreSQL, MySQL, Neo4j, MangoDB
Software & IDEs: VS Code, Eclipse IDE, TensorFlow

ACHIEVEMENTS

- **On the Spot Award**, March 2021: Recognized for improving system efficiency by 20% and resolving critical issues.
- **Star of the Month**, June 2022: Honored for increasing project delivery speed by 30% and achieving a 95% client satisfaction rate.