AJITH CHOWDARY NUTHALAPATI

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PROFESSIONAL SUMMARY

Passionate computer engineering graduate with hands-on experience in distributed systems and database optimization. Proven ability to enhance performance, as demonstrated by reducing query latency by 20% in a large-scale database project. Skilled in AWS cloud deployment (EC2, S3) and custom logging mechanisms for improved data reliability. Strong problem-solver, evidenced by winning a hackathon with a time-critical solution. Effective leader and communicator, having led a team in an OS kernel project and taught complex concepts as a teaching assistant.

PROFESSIONAL EXPERIENCE

Glenysys Technologies Inc   **Aurora, IL, USA**
Software Engineer   *August 2023 - January 2024*
- Engineered scalable web applications using React, Spring Boot, and AWS (EC2, S3, RDS, Lambda, DynamoDB), achieving 99.9% uptime through distributed systems architecture, and optimized CI/CD pipelines with Jenkins, Docker, and Maven to reduce deployment times by 15% and errors by 25%.
- Enhanced database performance by implementing RESTful APIs with SQL Server, improving data retrieval speed by 20%, and led Agile sprints using Jira and Trello to accelerate feature delivery by 25% while ensuring system reliability.

Iowa State University   **Ames, IA, USA**
Graduate Teaching Assistant   *August 2022 - December 2022*
- Mentored over 20 students in C programming and database concepts, designing exercises with data structures and algorithms to boost problem-solving skills by 30%.
- Provided detailed code reviews, leveraging debugging techniques to improve code quality for 90% of students and enhance collaborative learning.

Iowa State University   **Ames, IA, USA**
Graduate Research Assistant   *July 2022 - December 2022*
- Developed a student dashboard using R, SQL, and MySQL, applying query optimization to reduce data retrieval times by 8 seconds and increase efficiency by 25% in a distributed system.
- Enhanced UI/UX with responsive design and automated updates using cron jobs, ensuring real-time data accuracy and usability.

Snagger India Pvt. Ltd.   **Vijayawada, Andhra Pradesh, India**
Software Engineer   *August 2019 - July 2021*
- Developed a hybrid mobile app with React and Spring Boot for distributed data synchronization across 90+ retail partners and an AR application using Unity 3D and C# for immersive solutions in construction and manufacturing, enhancing client engagement.
- Improved performance by implementing distributed caching, database indexing, and RESTful APIs, reducing mobile app latency by 50% and increasing AR app client sales by 30%, while scaling to over 5,000 users.
- Utilized Docker and Jenkins for CI/CD in a distributed architecture, ensuring scalable deployments and rapid feature iteration with Agile methodologies for both applications.
- Optimized AWS infrastructure with EC2 and Terraform for cost-effective scaling to support 90+ partners, and enhanced workflows with Jenkins automation and code reviews, boosting project efficiency by 20%.

EDUCATION

Iowa State University   **August 2021 - August 2023**
Master's, Computer Engineering   *GPA: 3.49*
- Graduated with a dual major in Computer Engineering and Cyber Security.

SRM University   **July 2016 - May 2020**
Bachelor's, Computer Science   *GPA: 3*
- Graduated with a major in Computer Science and Engineering

PROJECTS EXPERIENCE

Advanced Analysis of Null Pointer Dereferences in Java   **Ames, IA, USA**
Student   *August 2022 - December 2022*
- Analyzed null pointer dereferences in Java using data structures and algorithms, leveraging tools like Infer, SonarQube, and SpotBugs with the Juliet Test Suite to enhance software testing skills.

- Developed a stack trace-guided tool for fault localization, achieving superior accuracy over manual methods and demonstrating proficiency in systems programming and problem-solving.

Vehicle Safety System through Drowsiness Detection   **Chennai, Tamil Nadu, India**
Student   *2018 - 2018*
- Designed a real-time drowsiness detection system using Matlab, incorporating Sobel Edge Detection, Viola-Jones, and K-Means Clustering algorithms for driver alertness analysis.
- Implemented data-driven facial and eye movement analysis, highlighting skills in algorithm development for safety-critical distributed systems.

SKILLS

Programming Languages: C/C++, Python, C#, PHP, Java, JavaScript, OOP
Web Technologies, Frameworks, and Libraries: Spring Boot, React.js, Node.js, AngularJS, Django, Flask
Databases: AWS DynamoDB, MongoDB, SQL Server, MySQL
DevOps and Automation Tools: Jenkins, Docker, Terraform, Jira
Cloud Platforms: AWS, GCP