AJITH CHOWDARY NUTHALAPATI

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PROFESSIONAL SUMMARY

Enthusiastic and adaptable team player with a strong work ethic and a passion for helping others. Experienced in fast-paced environments, collaborating with diverse teams, and delivering exceptional results under pressure. Skilled at solving problems, building connections, and creating positive experiences for customers and colleagues alike.

EDUCATION

Iowa State University

August 2021 - August 2023

Master's, Computer Engineering

GPA: 3.49

- Dual focus: Computer Engineering and Cyber Security.
- Software Safety Analysis, Security & Privacy in Cloud, Advanced Data Storage Systems, and Wireless Network Security

Other July 2016 - May 2020

Bachelor's, Computer Science

GPA: 3

• Natural Language Processing, Web Programming, Artificial Intelligence, Data Science and Big data Analysis, Programming in Java and PHP, Data Structures and Algorithms, and Object-Oriented Programming using C++.

PROFESSIONAL EXPERIENCE

Glenysys Technologies Inc

Aurora, IL, USA

Software Engineer

August 2023 - January 2024

- Developed scalable web applications using React, Spring Boot, and AWS (EC2, S3), improving system uptime by 99.9%.
- Optimized CI/CD pipelines with Jenkins and Docker, reducing deployment times by 15%.
- Implemented RESTful APIs with SQL Server, enhancing data retrieval speed by 20%.
- Led Agile sprints using Jira, accelerating feature delivery by 25%.

Iowa State University

Ames, IA, USA

Graduate Teaching Assistant

August 2022 - December 2022

- Guided 20+ students in C programming, boosting their debugging skills through hands-on labs.
- Created coding exercises, increasing student problem-solving proficiency by 30%.
- Updated course materials to reflect industry standards, enhancing learning outcomes.
- Evaluated projects, providing feedback that improved code quality for 90% of students.

Iowa State University

Ames, IA, USA

Graduate Research Assistant

July 2022 - December 2022

- Implementation a student dashboard with R, SQL, and MySQL, reducing load times by 8 seconds.
- Enhanced UI/UX with responsive design, improving user satisfaction by 15%.
- Automated data updates using cron jobs, ensuring real-time dashboard accuracy.
- Optimized server-side queries, increasing data retrieval efficiency by 25%.

Snagger India Pvt. Ltd.

Vijayawada, Andhra Pradesh, India

Software Engineer

August 2019 - July 2021

- Built the Snagger mobile app with React and Spring Boot, growing the user base by 5,000+ in one month.
- Designed secure RESTful APIs with AWS (DynamoDB) and MongoDB, cutting latency by 50%.
- Improved project efficiency by 20% through Jenkins automation and code reviews.
- Optimized cloud infrastructure, ensuring seamless API synchronization for 90+ retail partners.
- Built scalable cloud-based IMS (Java, Spring Boot, React, AWS, MongoDB) and optimized AWS infrastructure (EC2, Terraform) for cost reduction. Integrated external APIs to automate data synchronization and processing workflows.

Code Beat Pvt. Ltd.

Hyderabad, Telangana, India

Software Intern

May 2018 - July 2018

- Engineered an IoT-enabled remote car using Arduino, implementing gesture recognition for navigation.
- Built and programmed sensor-driven projects, including hand-gesture-controlled and smart lighting.
- Gained proficiency in TCP/IP, Networking Technologies (LAN, WLAN, WAN), and SSL Certificate.
- Acquired expertise in network configuration, OSI troubleshooting, and IPv4 addressing schemes

PROJECTS & OUTSIDE EXPERIENCE

Snagger App

Vijayawada, Andhra Pradesh, India

Software Developer

August 2019 - February 2021

- Engineered a hybrid mobile app with React and Spring Boot, enabling online/offline functionality for 90+ retail partners.
- Optimized AWS and MongoDB infrastructure, reducing app latency by 50% and boosting user satisfaction by 20%.
- Integrated RESTful APIs for seamless partner synchronization, driving 5,000+ user acquisitions in one month.
- Leveraged Docker and Jenkins for scalable deployment, improving system reliability and deployment efficiency.

Link to project

Snagger AR App *Software Engineer*

Vijayawada, AP, India

May 2019 - January 2021

- Developed an AR application using Unity 3D, MAXST, C#, and Android SDK, enabling clients in construction and manufacturing to showcase projects.
- Increased client sales by 30% through immersive visualizations, enhancing customer engagement and project visibility.
- Containerized the app with Docker, ensuring cross-platform compatibility and consistent deployment.
- Applied agile methodologies for rapid iteration, delivering features within tight deadlines and improving development velocity.

Advanced Analysis of Null Pointer Dereferences in Java

Ames, IA, USA

Student

August 2022 - December 2022

- Investigated null pointer dereferences (CWE476) in Java, analyzing their causes, impacts on software reliability, and prevalence as a primary memory-related vulnerability.
- Evaluated static analysis tools (Infer, SonarQube, SpotBugs) using the Juliet Test Suite, measuring detection performance with metrics like recall, precision, and false-positive rates.
- Developed and tested a stack trace-guided automatic localization tool on eight open-source Java projects, confirming its effectiveness in pinpointing null pointer exception sources.
- Compared the localization tool's performance against manual inspection by peers, demonstrating its superior accuracy and efficiency in fault localization.

Vehicle Safety System through Drowsiness Detection

Chennai, Tamil Nadu, India

Student

2018 - 2018

- During our second year of bachelor's, we developed a vehicle safety system focusing on driver drowsiness detection
- Using real-time facial and eye movement analysis, our system calculates a drowsiness index to preempt accidents, implemented in Matlab
- It integrates Sobel Edge Detection for edge delineation, the Viola-Jones Algorithm for facial recognition, and K-Means Clustering to assess the driver's alertness by analyzing eye and mouth status
- This project highlights the role of image processing algorithms in improving vehicle safety and preventing accidents due to drowsiness.

Reprogrammer RC Car

Hyderabad, TG, India

August 2018 - September 2018

• Modified a commercial remote-controlled car for obstacle evasion, replaced the motor for increased speed, and integrated a gesture recognition sensor for hand signal responsive stopping.

SKILLS

Programming Languages: C/C++, Python, C#, Php, Objective-C, Java, JavaScript

Web Technologies, Frameworks and Libraries: HTML5/CSS3, React. Js, Angular JS, Bootstrap, Django, Flask, Node. js, Spring Boot

Databases: AWS, GCP, Snowflake

DevOps and Automation Tools: CppCheck, CodeChecker, SonarQube, SpotBugs, JUnit, Postman

Machine Learning: Numpy, Pandas, PyTorch, R, Tensorflow

OS and scripting: Linux/Unix, Powershell, Unix Shell Scripting, Bash

Other Tools and Platforms: Heroku, Jira, Jupyter, Matlab, ServiceNow, SSMS, WebLogic, Firebase, gRPC