

AJITH CHOWDARY NUTHALAPATI

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SUMMARY

Highly motivated and results-oriented computer engineer with a Master's degree in Computer Engineering. Possesses strong full-stack development expertise with experience in designing, developing, and deploying scalable web applications. Proven ability to leverage cloud platforms (AWS, GCP) to build efficient and secure software solutions. Skilled in a variety of technologies including Java, Spring Boot, React, and Agile methodologies. An enthusiastic team player with a passion for innovation and problem-solving.

EDUCATION

Iowa State University
Master's, Computer Engineering

August 2021 - August 2023
GPA: 3.49

Other
Bachelor's, Computer Science

July 2016 - May 2020
GPA: 3

PROFESSIONAL EXPERIENCE

Glenysys Technologies Inc
Software Engineer

Remote
August 2023 - January 2024

- Built user-friendly web applications with optimal UX and maintainability, leveraging AWS (EC2, S3, RDS) for scalability and security. Integrated third-party APIs to enhance application functionality, leading to improved user engagement and satisfaction.
- Developed and maintained hybrid applications and deployed highly scalable serverless applications on AWS (14% efficiency/performance gain). Implemented RESTful APIs for seamless data exchange between front-end and back-end systems.
- Optimized operational efficiency by implementing Maven and Jenkins for streamlined workflows, reducing deployment time by 15% and decreasing error rates by 25% in AWS and Snowflake environments.
- Utilized AWS services including EC2, VPC, CloudWatch, IAM, S3, and RDS for scalable infrastructure, monitoring, security, storage, and database management.
- Skilled in Docker container management and image manipulation, integrating seamlessly with Spring Boot for optimized development and deployment.
- Configured asynchronous messaging in Tomcat, and WebLogic enhancing application communication and performance.
- Configured job scheduling with Cron and SQL Server Agent, leveraging Jira and Trello for agile project management and defect resolution, enhancing system reliability and team collaboration.

Iowa State University
Graduate Teaching Assistant

Ames, IA, USA
August 2022 - December 2022

- Guided 20+ undergraduate students as Teaching Assistant, improving proficiency in C programming
- Streamlined student abilities in writing, designing, and debugging computer programs, leading to a higher success rate in resolving complex software engineering challenges.

Iowa State University
Graduate Research Assistant

Ames, IA, USA
July 2022 - December 2022

- Led the implementation and upkeep of the Student Dashboard utilizing R, RStudio, SQL, and MySQL.
- Optimized the dashboard with routine updates via the university's Linux server, resulting in an 8-second decrease in loading time.
- Enhanced the overall UI/UX by rigorously testing and debugging to ensure optimal user experience.

Snagger India Pvt. Ltd.
Software Engineer

Vijayawada, Andhra Pradesh, India
August 2019 - July 2021

- Led project of Snagger app with a team of 5, securing 90+ partner stores in 2 weeks, driving a 5000+ user growth in 1 month.
- Developed high-performance web applications (PHP, JavaScript, React), reducing access time by 50%. Designed and implemented API endpoints to enable seamless integration with partner services and third-party applications.
- Streamlined the SDLC by crafting requirement specifications and design documents. Ensured optimal performance through an Agile framework, conducting daily stand-ups, and implementing TTD for robust software development.
- Conducted thorough security enhancements with tools like Postman, Burpsuite, Wireshark, and Aircrack-ng, improving application security and performance by 20%.
- 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.
- Lead seminars for aspiring software engineers to share knowledge of AR/VR and XR applications.

- Executed the deployment of web applications via AWS services, including EC2 and S3, while managing and manipulating MySQL and MongoDB databases.
- Implemented efficiency optimizations that reduced project delivery timelines by 20%, leading to an enhanced UX and a subsequent increase in customer satisfaction ratings.
- Engaged in 100+ code reviews to ensure code quality for better efficiency and performance.

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

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.

Snagger App

Vijayawada, Andhra Pradesh, India

Software Developer

August 2019 - February 2021

- A mobile application that presents a distinctive hybrid model, adeptly merging online and offline components
- Subscribers are afforded the opportunity to avail themselves of exclusive discounts at our esteemed retail partners
- A key differentiator of our business model is the unrestricted usage during the subscription tenure, offering exceptional value to our clientele
- This avant-garde strategy positions us uniquely in the marketplace, providing a thorough and gratifying consumer experience.
- [Link to project](#)

Advanced Analysis of Null Pointer Dereferences in Java

Ames, IA, USA

Student

August 2022 - December 2022

- Independently investigated null pointer dereferences (NPEs) in Java, analyzing causes, solutions, and static analysis tool effectiveness.
- Empirically evaluated Cppcheck, Codechecker, Infer, SonarQube, and SpotBugs using the Juliet Test Suite.
- Gained insights into tool precision and false-positive rates for NPE detection in Java.
- Enhanced understanding of software vulnerabilities and accurate vulnerability detection in cybersecurity.
- Enhanced my research abilities and technical depth in static analysis tools, significantly improving my problem-solving skills.
- Developed research skills and technical depth in static analysis tools, improving problem-solving abilities.

SKILLS & INTERESTS

Tech Stack: AWS, C#, Data Structures & Algorithms, Docker, Flutter, Google Cloud Platform, Heroku, JavaScript, JIRA, Jupyter, Git, HTML/CSS, Java, PowerShell, Linux/Unix, C/C++, MongoDB, MySQL, NumPy, Pandas, PHP, Objective-C, Postman, Pytorch, SQL, Python, UI/UX Design, NoSQL, Firebase, MATLAB, Maven, Snowflake, Spring, Spring Boot, Gradle, Cppcheck, Codechecker, SonarQube, S3, RDS, Redshift, SNS, SQS, EC2, VPC, IAM, DynamoDB, Lambda, CloudWatch, Snowflake, NoSQL, Wireshark, Apache Maven, JUnit, RDBMS, R, ServiceNow, Software Testing, Tensorflow, Tomcat, WebLogic, Agile, SCRUM, KANBAN, Unix Shell Scripting, Bash, SSMS, Full Stack Web Development, REST APIs, Microservices, Kubernetes, Nginx, Postgres, Redis, React.js, gRPC

Languages: Hindi, Finnish, Telugu, German, English

Interests: Swimming, Music, Woking out, and Hiking