Ajith Chowdary Nuthalapati

 $515-460-2747 \mid \underline{\text{nac}59@iastate.edu} \mid \text{linkedin.com/in/ajithchowdary} 149 \mid \text{github.com/PPYL-59}$

EDUCATION

Iowa State University

Ames, Iowa

Master's in Cyber Security and Computer Engineering, 3.49

Aug. 2021 - May 2023

SRM University

Chennai, India

Bachelor's in Computer Science and Engineering, 3.0

Aug. 2016 - Aug. 2020

TECHNICAL SKILLS

Languages: Java, Python, C/C++, C#, JavaScript, HTML, CSS, SQL, R, Linux Shell Scripting.

Frameworks/Libraries: Spring Boot, Gradle, Maven, Numpy, Unity, React, Git, Jira, Trello, TensorFlow, MATLAB, Service Now.

Tools/Technologies: Git, Docker, AWS (DynamoDB, S3, IAM, Cloudwatch, RDS, EC2, VPC, SNS, SQS, Lambda), Snowflake, Cppcheck, Codechecker, GCP, GitHub, MongoDB, TCP /IP, Wireshark.

EXPERIENCE

Software Developer Engineer I

Aug. 2023 – Jan. 2024

Glenysys Technologies Inc.

Remote, US

- Leveraged AWS services (EC2, VPC, CloudWatch, IAM, S3, RDS) for scalable infrastructure, monitoring, security, storage, and database management.
- Skilled in Docker container management and image manipulation, streamlining development and deployment with Spring Boot.
- Configured asynchronous messaging (Tomcat, WebLogic) for enhanced app communication and performance.
- Automated job scheduling (Cron, SQL Server Agent) and implemented agile project management (Jira, Trello) for improved system reliability and team collaboration.
- Developed user-facing applications (Java, C#, JavaScript) using **Spring Boot and React** for optimal UX.
- Optimized project workflows with Maven and Jenkins. Deployed scalable applications on AWS and Snowflake.

Graduate Teaching Assistant

Aug. 2022 – Dec. 2022

Iowa State University

Ames, Iowa

- Assisted Dr. MD Maruf Ahmed in coursework delivery.
- Mentored **20**+ students, contributed to programming assignments, exams, and recitations.

Graduate Research Assistant

Jul. 2022 – Dec. 2022

Iowa State University

Ames, Iowa

• Contributed to developing and maintaining the Student Dashboard using **R** and **SQL**. Optimized performance and enhanced UI/UX through rigorous testing and debugging, ensuring a **3-second decrease** in loading time.

Software Engineer

Aug. 2019 – Feb. 2021

Snagger India Pvt. Ltd.

India

- Led development of Snagger app (UX/UI focus) with a **5-person** team, securing **90+** partner stores in **2 weeks**, driving a **5,000+** user base growth in **1 month**.
- Enhanced web app performance and security using pen-testing (Wireshark, Aircrack-ng, John the Ripper).
- Collaborated on database design (MongoDB, Firebase) for optimal data management.
- Reduced app loading time by 28%, scaled capacity, and improved efficiency through debugging.
- Optimized processes to cut project delivery times by 20%, enhancing user satisfaction.
- Shared knowledge of AR/VR applications by leading seminars for aspiring software engineers.

Projects

Advanced Analysis of Null Pointer Dereference in Linux

Fall, 2022

• Investigated and resolved a null pointer dereference in Linux by analyzing and comparing static analysis tools (Cppcheck, Codechecker, Facebook Infer, SonarQube) against the Juliet Test Suite for cybersecurity enhancement. This process sharpened my expertise in static analysis and problem-solving skills in cybersecurity.

Driver Drowsiness Detection

Fall, 2018

- Developed a vehicle safety system to prevent driver accidents using real-time facial and eye movement analysis.
- Implemented Sobel Edge Detection, Viola-Jones Algorithm for facial recognition, and K-Means Clustering to assess driver alertness based on eye and mouth status.