DEEPTHIKA SIVARAM

Buffalo, NY | deepthika.sivaram@gmail.com | (716) 808-9417 | www.linkedin.com/in/deepthikasivaram

SOFTWARE DEVELOPMENT ENGINEER

Innovative Software Developer with over 3 years of experience at Citi and other industry settings, specializing in Java application and mobile app development. Proficient in building robust software solutions and enthusiastic about exploring machine learning techniques to enhance software development. Pursuing an **M.S. in Computer Science Engineering (AI/ML) from the State University of New York at Buffalo.**

SKILLS

Programming:	C, C++, C#, JavaScript, Java, Spring Boot, Python, HTML, SQL, Bash, YAML
Tools:	JIRA, Git, Bitbucket, Jenkins, Excel, Splunk, SOAP UI, IntelliJ, Visual Studio Code, GitHub CoPilot, Docker, Adobe, Selenium, Rest Assured

WORK EXPERIENCE

Citigroup   *Chennai, India*
Software Development Engineer 2   July 2021 - July 2024

- **Subject Matter Expert:** Acted as the leading expert for the India site for Mutual Funds concepts, providing in-depth knowledge to cross-functional teams and facilitating knowledge transfer, striving to build team expertise, ensuring operational independence, and enhancing the team's overall effectiveness in financial services.
- **Cross-Domain Projects:** Led and managed two critical software development projects, integrating **cross-domain** knowledge (Retail Banking) to deliver successful results and drive project success.
- **Quantum Code Base Development:** Engineered the code base for mobile application testing using the **Quantum BDD Framework, Spring,** and **Selenium**, significantly advancing the team's testing capabilities and streamlining future project development.
- **C# Automation Development:** Developed and optimized automation scripts in C#, streamlining the testing process and improving overall development efficiency through effective test automation solutions.
- **Test Data Automation:** Developed automated test data solutions by leveraging internal **APIs** and utilizing **SQL** for efficient data management and retrieval.
- **Awards and Recognition:** Honored with **Citi's Gratitude Copper and Bronze Awards** for outstanding contributions and excellence in software development.

Morgan Stanley   *Bangalore, India*
Software Development Intern   May 2020 - July 2020

- **CI/CD of Microservices into Cloud:** Developed a Proof of Concept (POC) application aimed at optimizing product delivery to cloud environments by integrating **containerization** using **Docker**, leveraging cloud services, and applying **DevOps** practices.
- **Deployment Model Research:** Conducted comprehensive research on **blue-green deployment** strategies to refine and improve deployment efficiency and minimize downtime.
- **CI/CD Pipeline Automation:** Designed and implemented an end-to-end Continuous Integration/Continuous Deployment (CI/CD) pipeline using **Jenkins and YAML**, incorporating automated containerization, deployment with load balancing, and memory management techniques to ensure efficient and reliable operations.

EDUCATION

State University of New York at Buffalo   Buffalo, New York
Master of Science (M.S) in Computer Science Engineering (Artificial Intelligence/ Machine Learning)   *August 2024 - Present*
Courses: Data Intensive Computing, Machine Learning, Computer Security and Analysis of Algorithms

College of Engineering Guindy, Anna University   Chennai, India
Bachelor of Engineering (B. E) in Computer Science Engineering (**GPA : 9.26** *)*   *August 2017- May 2021*
Courses: Big Data Analytics, Data Structure and Algorithms,Machine Learning, Cloud Computing and Database Management

PROJECTS

- **Enhanced Pedestrian Detection:** A **convolutional neural network** model to enhance pedestrian detection in occluded and hazy weather conditions.
- **Steganography Messenger Mobile Application:** Engineered an **Android mobile application** that allows users to securely send encrypted messages by embedding them into **RGB images** leveraging **AES Algorithm.**
- **SQL Parser:** Created a SQL parser model capable of performing syntax analysis on input SQL statements using **LEX programming**. This tool streamlines SQL error detection and debugging by providing efficient syntactic validation, improving database query management for developers.
- **Pitchfest Inaugural Website**: Designed and developed the official website for the university's "Pitchfest" event, facilitating information dissemination and participant engagement. The website served as the central hub for event registration, schedule updates, and promotional content, contributing to the event's success.
- **Temporal Trends in Hospital Admissions - The Influence of Air Quality on Respiratory Health:** Conducted a data-driven analysis to investigate the relationship between air pollution (PM2.5, PM10, NO2, SO2) and hospital admissions for respiratory illnesses using five machine learning models. **Logistic Regression** model helped detecting admissions linked to air quality issues occurring six months prior. Findings provided actionable insights for improving healthcare system preparedness and resource allocation.