Sonali Vedaraju

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Education

M.S Computer Science ~ The University of Texas at Arlington ~ CGPA : 4.0 *Aug 2022 – May 2024*

B.E in Information Science ~ Visvesvaraya Technological University ~ CGPA : 3.2 *Aug 2014 – June 2018*

Proficiency

Languages and Frameworks : C# | Javascript | React | Redux | NodeJs | ASP.Net | .NetCore | Entity Framework
Tools : Visual Studio | Visual Studio Code | Git | Jenkins | Microsoft Azure | Kanban | Scrum | Jira
Database Management Systems and Operating Systems : SQL Server | MongoDB | MySQL | Windows | Linux

Work Experience

Graduate Teaching Assistant | University of Texas at Arlington, USA *Aug 2023 - present*

- Involved in leading discussions, and provided one-on-one assistance to students, resulting in improved understanding of complex software engineering concepts. Took on leadership roles within the TA team, coordinating lab sessions and managing course materials.

Software Engineer | Integra Micro Systems, Bangalore, India *Dec 2020 – July 2022*

- Implemented asynchronous processing for document verification requests, leveraging Node.js's event-driven architecture thus reducing the average verification processing time from 5 minutes to just 1 minute, significantly improving the KYC application's efficiency.
- Participated in discussions with stakeholders and managers, providing technical insights to support informed decision-making and project direction
- Thrived in a fast-paced Agile setting, contributing to the team's adaptability and collaborative efforts, resulting in the successful delivery of sprint objectives
- Employed Jest testing tools to optimise the performance of the VideoFlo application, enhancing its overall functionality and resulting in a 30% reduction in video loading times and file upload delays.

Software Development Engineer | TravTech Inc, Bangalore, India *Dec 2018 - Nov 2020*

- Applied **polymorphism** to create adaptable and interchangeable components, allowing for a flexible system that could cater to various user preferences and booking scenarios.
- Implemented the **Factory Method Pattern** to dynamically generate various types of cruise packages, providing adaptability based on user preferences and available options.
- Successfully resolved urgent technical issues, meeting tight deadlines and ensuring seamless operations during peak booking periods. Demonstrated adeptness in using **Git** for tracking project progress and ensuring streamlined collaboration among team members
- Thoroughly conducted **regression tests** to confirm that recent alterations, particularly in user interface improvements, did not negatively affect the fundamental operations of the application
- Employed plotting library Chart.js and generated a bar graph to display the most preferred destinations among users, aiding in tailoring marketing or package offers
- Revamped the Price Engine Windows service application design by leveraging **.NET's Task Parallel Library (TPL)** to process multiple files simultaneously, resulting in a 20% increase in parsing speed for incoming files

Projects

Real-time Meetup RSVP Stream Processing System | *Apache Spark, Kafka, Spark Streaming* *Summer 2023*

- Implemented algorithms to identify trending topics and tags from event descriptions. Successfully processed thousands of RSVPs per minute, ensuring data freshness and timely insights.

Hospital Management Application | *MERN Stack, Jenkins, AWS EC2* *Spring 2023*

- Developed a Hospital Management application. Leveraged Docker to containerize the application and hosted on AWS EC2. Mainly the project was based on Agile Methodologies, and we used Selenium and postman for our testing and followed SDLC life cycle model.

Sudoku Solver | *HTML, CSS, JavaScript* *Fall 2022*

- Utilised a recursive backtracking algorithm. Employed techniques like naked pairs, naked triples, and pointing pairs to reduce the search space and improve efficiency. Attained an optimal solution speed, solving expert-level puzzles in under 210 seconds on average.