Manali Rajendra Tawar

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Education

Master of Science in Computer Science **Aug 2021 – May 2023**

Syracuse University, Syracuse, New York, USA
Relevant Coursework: Database Management System, Social Media and Data Mining, Natural Language Processing

Bachelor of Technology in Computer Science and Engineering **Aug 2016 – May 2020**

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, India
Relevant Coursework: Data Structure, Algorithms, Databases, Programming in Java, Design Patterns, Software Engineering

Technical Skills

Programming Skills and Development Frameworks: Java, Python, React, Spring Boot, Hibernate
Database and Data Science: SQL, NoSQL, MySQL, Oracle, MongoDB, PostgreSQL, Machine Learning
Testing, Collaboration and Analytics Tools: Jira, JMeter, Postman, JUnit, Git, Jenkins, Bitbucket, Alteryx, Tableau
Development Platform: Amazon Web Services, Kubernetes, Google Cloud Platform

Work Experience

Syracuse University, Syracuse, New York, USA **July 2023 – Present**

Research Assistant

- Spearheaded the development of the Market Monitor project, an innovative Dash web application providing real-time insights into stock, company, and ETF data from NYSE and NASDAQ exchanges.
- Implemented advanced data retrieval functionality using the yfinance API, enabling the dynamic fetching of real-time financial data for over 200 stocks, companies, and ETFs.
- Integrated the Finviz API, enhancing the project's scope by 15% and allowing for a more comprehensive analysis of market trends and analytics.

Swift Rails Inc, New York, USA **August 2022 – Jan 2023**

Software Development Engineer Intern

- Revamped user interface, applying Jetpack Compose for responsive design, resulting in a 25% boost in user satisfaction.
- Engineered an optimized Firebase database structure, employing normalization techniques and indexing strategies, accelerating data accessibility and analysis by 40%.
- Integrated Google Places API for address autocomplete, enhancing input efficiency by 30% through asynchronous API calls and predictive text algorithms.
- Implemented meticulous code documentation, including concise comments, improving collaboration efficiency by 20% and ensuring codebase clarity and maintainability.

Wipro Technologies, Hyderabad, India **September 2020 – July 2021**

Software Engineer

- Increased email delivery efficiency by 20% by optimizing asynchronous retry logic in JavaMail API, reducing server load and improving user experience.
- Enhanced data accessibility by 30% by developing RESTful API endpoints using JPA with caching strategies and optimized queries, accelerating information retrieval for mission-critical reports.
- Optimized Spring Boot interactions with Hibernate by configuring second-level caching and fetch strategies for frequently accessed entities, reducing database calls by 25% and improving query speed.
- Boosted data validation accuracy by 15% with automated JUnit and Mokito unit tests covering input validation and data integrity checks, ensuring error-free query results and data consistency.

Projects

Notice Board - Spring Boot Application

- Engineered a robust RESTful app, managing a dynamic database with 1000+ notices, FAQs, and student requests.
- Implemented optimized CRUD operations, reducing response time by 30%, and incorporated JWT tokens for secure user authentication across a user base of 500.
- Enhanced search capabilities by 40% by integration of Hibernate filters, implemented PostgreSQL triggers for detailed activity logging, capturing 500+ daily transactions, and ensuring data integrity with a 25% reduction in anomalies.

Dining Breeze Bot Cloud

- Architected and developed a serverless, microservice-driven web application chatbot on AWS, utilizing Lambda functions, API Gateway, SQS, and DynamoDB.
- Applied NLTK for real-time analysis of user preferences within the chat, integrating a collaborative filtering algorithm to provide restaurant recommendations sourced from Yelp API data stored in DynamoDB.