Bala Murali Satyendra Bokka

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EDUCATION

Saint Louis University, Saint Louis, MO

Master of Science in Computer Science

Aug 2023 – May 2025

Sri Vasavi Engineering College, Pedda Tadepalli, India

Bachelor of Technology in Computer Science

June 2017 – June 2021

SKILLS

Programming Languages: Java, Python, C++, NodeJS

Frameworks & Libraries: Spring Boot, Angular, REST API, Express.js

Databases: PostgreSQL, MySQL, MongoDB

Tools & Platforms: Eclipse, Docker, GitHub, Spring Tool Suite, Visual Studio Methodologies: Agile (Scrum), Secure Coding Practices, Data Structures

EXPERIENCE

Project Coordinator (Team Lead) ITS

 $Saint\ Louis,\ MO$ Jan 2024 – April 2024

- Supervised 6 Agile teams for research projects, ensuring the on-time delivery of over 10 initiatives designed to assist new students in acclimating to Saint Louis.
- Facilitated weekly stand-up calls and in-person meetings, guiding teams toward key milestones and ensuring alignment with project goals, resulting in a 20% increase in team productivity.
- Resolved team conflicts and arranged expert consultations, leading to a 15% improvement in individual performance metrics, including project quality and timeliness.
- Developed project timelines, assigned tasks based on strengths, and tracked progress using Agile boards and sprint reports to ensure accountability and continuous improvement.
- Mentored junior team members on task ownership, communication best practices, and problem-solving approaches, fostering a more self-sufficient and collaborative team environment.

Software Application Developer

Intellect Design Arena

Hyderabad, India June 2021 – Aug 2023

- Spearheaded the development and integration of secure REST APIs and frontend modules using Java and Angular, achieving a 90% code quality rate and enhancing overall software functionality.
- Collaborated with a cross-functional team by leading design discussions, driving a 75% increase in alignment and project efficiency.
- Enhanced core backend processes, resulting in a 70% performance boost and fostering a culture of continuous innovation.
- Contributed to the design and architecture of microservices, significantly influencing product development strategy with measurable improvements in scalability by 80%.
- Designed and built microservices with Spring Boot, incorporating Spring Data JPA and Spring Web Services for scalable, high-performance architecture.
- Utilized Hibernate ORM for efficient and type-safe database operations, improving data access consistency across services.
- Practiced Test-Driven Development (TDD) with JUnit, writing unit and integration tests to ensure robust, maintainable code and reduce regression issues.
- Utilized Git for version control, enabling collaborative development and maintaining CI/CD pipelines.

- Researched implementing jOOQ over Hibernate, leveraging jOOQ's internal DSL and source code generation for type-safe SQL and improved database query efficiency.
- Implemented multicore thread processing for real-time transactions using Spring WebFlux 5.0.
- Streamlined data seeding using PostgreSQL stored procedures, reducing testing time by 70
- Integrated Apache Kafka and RabbitMQ for message passing systems to handle API and microservices communication.
- Designed batch job scheduling microservices across time zones, improving transaction handling.
- Modernized legacy J2EE code, improving application efficiency and maintainability.

PROJECTS

Survey Website June 2024

- Built scientific survey platform using JavaScript & Node.js, enhancing user engagement by 40%.
- Developed filtering/sorting tools reducing search time by 60%.
- Analyzed 50+ papers, classifying by problem, solution, and methodology.

AgriCom Dec 2023

- Built React-Node is based social media app for farmers, reducing communication gaps by 70%.
- Applied ML for crop disease prediction, achieving 100% accuracy.
- Developed marketplace for farm tools, improving reuse by 50%.

Churn Prediction Dec 2023

- Conducted analysis on banking customer churn using visualization and ML models.
- Achieved 80.35% accuracy via Random Forest; applied ensemble techniques for mitigation.
- Leveraged ensemble methods such as bagging and boosting to enhance model robustness and mitigate overfitting.
- Visualized key trends using Matplotlib and Seaborn, enabling actionable insights for churn mitigation strategies.
- Authored a research paper on findings, accepted at the International Business Analytics Conference (IBAC) 2024 SUNY Fredonia, NY.

CRUD Operations Web Application

Feb 2023

- Developed a Java Spring Boot application implementing full CRUD (Create, Read, Update, Delete) functionality for managing user data through RESTful APIs.
- Used Spring Data JPA and Hibernate to handle database interactions with PostgreSQL, ensuring efficient and scalable data persistence.
- Designed and exposed endpoints for client-side consumption, supporting real-time record creation, editing, retrieval, and deletion.

ADDITIONAL INFORMATION

- Awards: Implemented ISO PTE data seeding and archival logic, enhancing data retrieval efficiency. Received the Gem Award for outstanding dedication and contributions to the project.
- Research: Authored a research paper on banking sector customer churn prediction, showcasing 80.35% accuracy using Random Forest modeling and introducing ensemble methods for mitigation: accepted in the proceedings of "International Business Analytics Conference (IBAC) 2024"-SUNY Fredonia NY.