

MANASA BIJJALA

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SUMMARY

- Full Stack Developer with over 3 years of experience designing, developing, and deploying scalable web applications using modern frontend and backend technologies.
- Activated building responsive and accessible user interfaces with HTML5, CSS3, JavaScript, React.js, and Angular, ensuring seamless performance across devices and browsers.
- Proficient in developing RESTful APIs and server-side logic using Python, Node.js, and Spring Boot, with a focus on clean, secure, and testable code.
- Strong foundation in relational databases such as MySQL and PostgreSQL, including schema design, data normalization, indexing, and query optimization for performance.
- Experience deploying cloud-native applications on AWS, utilizing services like EC2, S3, RDS, and Lambda, along with foundational knowledge of IAM, VPCs, and serverless architecture.
- Expedited project lifecycles by 40% through leading daily Scrum meetings, managing sprint planning, and resolving issues via JIRA; drove efficient version control using Git and GitHub.
- Containerized applications using Docker, streamlining the development and testing processes, enabling the team to resolve 95% of environment-related bugs before production and improve code stability

SKILLS

- **Programming Languages:** Python, Java, SQL, C/C++, R, C#
- **Front- End:** React.js, HTML5, CSS, Bootstrap, Angular2+, JavaScript, TypeScript
- **Back-End:** Spring Boot, Node.js, Express.js, RESTful & GraphQL APIs
- **Version Control:** Git, GitHub, GitLab
- **Cloud & Containerization:** AWS (S3, Redshift, Lambda), GCP, Azure, Docker
- **Methodologies:** Agile, Scrum, CD
- **Database Management:** MySQL, PostgreSQL, NoSQL, Microsoft SQL Server, Big Query. Data Visualization Tools & Wrangling Tableau, Power BI, Data Visualization, Data Wrangling.
- **Libraries:** NumPy, Pandas, Matplotlib, Scikit-Learn, PyTorch, TensorFlow, XGBoost, Keras
- **Additional Technologies:** Elixir, Phoenix
- **Software Development Practices:** Git Version Control, Code Reviews, System Testing
- **Specialized Solutions:** Telehealth Solutions, Decision Support

EXPERIENCE

Research Assistant

TheUniversity of Southern Mississippi.

Aug 2023 – Dec 2024

Hattiesburg, MS

- Engineered an employee performance analysis application featuring automated weekly report generation, achieving an average delivery time of under 30 minutes, and improved data accessibility by 60%.
- Initiated a secure and efficient Flask backend, integrating role-based access control and rate limiting, which handled 500+ requests per minute with a 99.9% uptime.
- Designed a responsive and user-friendly frontend, ensuring a seamless experience across devices with React and modern web technologies.
- Integrated RESTful APIs for real-time data communication between frontend and backend, ensuring smooth data flow and enhancing application interactivity.
- Completed full-stack development certifications, strengthening expertise in both frontend and backend technologies and building scalable web applications.

Full Stack Developer

Reznex

Jun 2022 – Jul 2023

Bangalore, India

- Implemented React.js and Spring Boot to revamp booking and inventory management, increasing booking efficiency by 20% and reducing booking cancellations by 12% within six months.
- Devised and enforced robust RESTful APIs for managing room availability, user authentication, and payment processing, streamlining backend communication and improving system scalability.

- Optimized SQL queries and implemented indexing strategies in MySQL/PostgreSQL, reducing database query response times by up to 40% for high-volume transactions.
- As the sole engineer leading the initiative, built 5+ reusable API components that other engineers

could reuse, which reduced the development time for new features by an average of 10 hours.

- Migrated core application from a monolithic to a microservices architecture, resulting in a 75% improvement in fault isolation and slashing debugging time by approximately 50 hours per month.
- Built and maintained automated CI/CD pipelines using Docker, Jenkins, and GitHub Actions, reducing manual deployment efforts and enabling faster release cycles.
- Strengthened application security by implementing JWT-based authentication, form validation, and rate limiting, protecting APIs against unauthorized access and common attack vectors.
- Enhanced application performance by identifying and resolving three critical code bottlenecks during sprint reviews, leading to a 20% improvement in API response times for user requests.
- Collaborated with QA teams to write and maintain unit and integration tests using JUnit and Mockito, improving code reliability and reducing post-release defects.

Full Stack Developer Intern

Jun 2021 – Jun 2022

- Configured frontend components of the hotel booking platform using HTML5, CSS3, Bootstrap, and React.js, enhancing the user interface and experience.
- Streamlined the backend integration for managing hotel room data by architecting CRUD operations with Node.js and Express.js, resulting in 99.9% uptime for room data services.
- Enhanced database performance and reliability by tuning SQL queries, which reduced average query latency by 40% and improved responsiveness for hotel room availability searches.
- Reduced the average time spent on user bookings by 10 seconds through implementing streamlined form validation, leading to 200+ successful bookings handled daily with zero impact on the site's performance.
- Co-ordinated to Agile practices, attending daily standups, sprint retrospectives, and using JIRA for task management, while supporting bug fixes and testing

PROJECTS

DOCTOR APPOINTMENT BOOKING SYSTEM

Aug 2024 – Dec 2024

- Developed a MERN Stack application using React.js, Node.js, Express.js, and MongoDB to manage doctor appointments with 3 levels of authentication for patients, doctors, and admins.
- Drove code quality improvements across 7 applications by implementing static code analysis tools and systemized testing frameworks, reducing defect density by 25% and enhancing reliability.
- Optimized application performance by reducing loading time by 30%, ensuring scalable data management, and implementing role-based security for user access control.

DATA ANALYSIS BY WEB SCRAPING

Jan 2022 - Jun 2022

- Created a Python script using Pandas to automate formatting and standardizing data for new data sources, helping new team members onboard to data processes 50% faster.
- Constructed interactive dashboards visualizing web-scraped data, delivering actionable intelligence to stakeholders, utilizing Python libraries (Pandas, BeautifulSoup, Selenium, Matplotlib), facilitated a 20% increase in efficiency.

CERTIFICATES

- **AWS Cloud Practitioner Essentials** – Completed through AWS training
- **Certified Full Stack Developer Curriculum** – FreeCode Camp
- **Responsive Web Design Certification** – FreeCode Camp
- **Achieved PCAP in Python** – Validated Python programming skills.
- **Certified in Machine Learning** – Internshala Trainings, 2021.

EDUCATION

University of Southern Mississippi | Hattiesburg, MS

Aug 2023 - May 2025

Master's in computer science | Grade: 3.83/4