Sai Manikanta Karnati

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Summary — Software Engineer with 3+ years of experience in development, testing, and optimization. Skilled in leading projects, object-oriented design, and creating scalable, maintainable solutions. Strong debugging skills, consistently delivering high-quality results under deadlines.

Experience

University Of North Carolina At Charlotte   08/2024 – Current
Graduate Teaching Assistant

– Led weekly discussion sections with over 40 graduate students, facilitating hands-on coding exercises and enhancing their understanding of algorithm design and data structures.
– Graded assignments and exams for 100+ students, providing detailed feedback on coding skills and algorithmic thinking, contributing to an overall 10% improvement in class performance.
– Developed supplementary instructional materials (problem sets, study guides, lecture notes), which were used by 95% of students in the course, enhancing learning retention.
– Collaborated with the professor to refine the curriculum, incorporating the latest research trends and technologies, leading to a 20% increase in student engagement.

Fully In Control B.V.   01/2024 – Current
Software Engineer

– Enhanced core functionalities, resulting in a 15% increase in sales and a 20% boost in user satisfaction (based on customer feedback surveys).
– Optimized front-end performance through the implementation of caching techniques, reducing database calls by 20% and improving page load times.
– Introduced Playwright for test automation, cutting down application bugs by 45%, improving release cycle efficiency, and reducing manual testing time by 30%.
– Engineered a collaborative feature that increased customer engagement, leading to a 10% growth in active users.
– Gained hands-on experience with a range of AWS services, including S3, IAM, Lambda, Redshift, ELB, VPC, and KMS, enabling efficient cloud infrastructure management and improving application scalability and security.

Xebia   08/2022 – 12/2023
Associate Software Engineer

– Optimized MongoDB queries with indexing and MongoDB Atlas Search, improving data retrieval speed by 15% and reducing server load by 10%.
– Designed and deployed 10+ REST APIs using Node.js and Express, cutting response times by 25% and enhancing backend scalability.
– Re-architected features using Pub-Sub models, boosting application performance by 20% and improving UI responsiveness.
– Applied Design Patterns to streamline feature development, reducing delivery time by 10% and improving code maintainability.
– Improved database performance and reduced downtime by 5% through targeted query optimizations and performance tuning.

Xebia   08/2021 – 07/2022
Engineer Trainee

– Contributed to the development of a banking application as part of an internship project, collaborating with a team of 4 developers and completing the project 2 weeks ahead of schedule.
– Worked on implementing key features using React (frontend) and Java (backend), improving the application's functionality and user experience.
– Participated in code reviews to ensure adherence to coding standards, improving code quality and reducing post-release bugs by 30
– Assisted in project delivery, ensuring adherence to deadlines and contributing to the 98% on-time delivery rate.

Education

University Of North Carolina At Charlotte
Master of Science in Data Science
Minors: Database Systems, System Design And Implementation, Big Data & Cloud Computing

CMR Engineering College
Bachelor of Technology in Computer Science and Engineering
Minors: Algorithms & Data Structures, Java, Machine Learning

Certifications

- AWS - AWS Certified Developer Associate
- MongoDB - MongoDB Certified Developer
- Infosys - Infosys Certified Software Programmer
- Java - NPTEL certified Java Developer
- AWS - AWS Academy Graduate - AWS Academy Data Engineering

Skills

Cloud: AWS
FrontEnd: HTML, CSS, VueJS, ReactJS, AngularJS, Quasar, Material UI, Tailwind,SAP UI5
BackEnd: NodeJS, Spring Boot, Express JS, Meteor JS, Firebase
Databases: SQL, MongoDB
Languages: Javascript, Java, Python
Automation: Playwright
Others: JIRA, Confluence, BitBucket, Git, VS Code, Agile Methodologies