ARUN KUMAR REDDY KATIKA
(+1) 913-238-8878 | saiarun081@gmail.com | www.linkedin.com/in/saiarun081 |

Objective: Passionate Engineer seeking Internship opportunity from May 2024.

EDUCATION

University of Missouri-Kansas City Kansas City, MO
Master of Science in Computer Science, CGPA: 4 Aug 2023 – May 2025
Courses: Design and Analysis of Algorithms, Advanced Operating Systems, Distributed Computing, Network Architecture

National Institute of Technology, Andhra Pradesh Andhra Pradesh, India
Bachelor of Technology in Electronics and Communication Engineering, Aug 2019 – May 2023
Courses: Object Oriented Programming, Data Structures and Algorithms, Data Networks, Optimization techniques

KEY SKILLS

Programming Languages: Java, HTML, CSS, JavaScript, TypeScript, Python, Shell, SQL
Frameworks: SpringBoot, Angular, Angular.js, React, Node.js, Express, Django, JUnit, JEST, Redux, Ajax, RxJS, jQuery
Tools & Technologies: GraphQL, Docker, CI/CD, GitLab, Jenkins, RabbitMQ, Material UI, Jira, GitHub, d3.js, REST, XML
Databases & Cloud: MongoDB, MySQL, PostgreSQL, Redis, Elastic Search, Firebase, AWS, Azure, Google Cloud
Professional Skills: Project Management, Mentorship, Leadership, Collaboration, Communication

PROFESSIONAL EXPERIENCE

Smartknower Bangalore, India
Software Developer Intern Jun 2022 – Nov 2022

- Contributed to the development of a full-stack web application (React, Node.js), ensuring user-friendly UIs and smooth integration between front-end and back-end components, boosting user satisfaction by 30% and engagement by 20%.
- Assisted in building the application with a microservices architecture to serve over 1000 monthly active users with an uptime of 98%, leveraging Spring Boot, React, and MongoDB.
- Participated in the migration from monolithic architecture to microservice architecture, contributing to Swagger API documentation and improving development time and productivity by 15%.
- Assisted in optimizing data retrieval by transitioning from RESTful APIs to GraphQL queries, resulting in improved response times from 400ms to 220ms and performance enhancements through strategic use of Elastic Search and Redis caching.
- Collaborated with a team of developers and testers, utilizing agile methodologies and Jira for task management and progress tracking. Contributed to a productive team environment, consistently outperforming others by 30% during each scrum iteration.
- Leveraged GitLab and Jenkins to facilitate code reviews, manage pull requests, and deploy CI/CD pipelines, resulting in a noteworthy 20% decrease in code conflicts and a 15% enhancement in code quality.

PROJECT EXPERIENCE

CRM Ticket System

- Led a team in developing a CRM ticket system web platform with MERN stack, delivering project planning, requirements analysis, system design, development, testing, monitoring, and maintenance, utilizing agile methodology and serving as scrum master.
- Designed and developed a user-friendly front-end with React.js, enabling clients to access a dashboard, submit tickets, and view details. Engineered a scalable backend architecture with Node.js and Express.js to handle API calls and database interactions.
- Utilized Trello for project management and implemented a microservices architecture to enhance application scalability.
- Successfully deployed the application on AWS, leveraging EC2 instances, ECS, PVCs, load balancers, and virtual networking for robust infrastructure.
- Established CI/CD pipelines to automate container builds and deployments upon code changes, ensuring continuous integration and delivery.

Distributed Video Processing Project

- Engineered a distributed system for video processing utilizing Flask, OpenCV, DLib, and ZMQ running on Docker containers.
- Developed a load balancer to dynamically distribute workload across multiple nodes. The application with three nodes outperformed a linear setup by 40%, demonstrating the effectiveness of horizontal scaling in distributed systems.
- Implemented functionality to retrieve the number of available worker machines and store job completion time statistics in a database. Designed to store the runtime of individual frames.
- Created a user interface displaying the IP addresses of each worker, unprocessed frames, completed frames on worker machines, and average time of completed jobs on a worker.

Advanced Product Recommendation System

- Developed an innovative product recommendation system merging machine learning and facial recognition technologies.
- Utilized TensorFlow and Convolutional Neural Networks for precise facial feature analysis and model training.
- Integrated DLib for robust face recognition, ensuring accurate customer identification.
- Established a scalable database on IBM Cloud and streamlined data access with Node-RED integration.