DHEERAJ REDDY KUKKALA

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Work Experience

Software Engineer (Croyance, Remote)   Mar 2024 – Present
- Enhanced system efficiency through designing and implementing RESTful API microservices in Java and Spring Boot for seat availability, pricing, and notifications, leveraging Kafka for real-time data streaming and seamless inter-service communication
- Ensured high availability and fault tolerance by deploying scalable microservices on AWS EC2 using Docker and Kubernetes. Improving system reliability and real-time processing through efficient workload distribution and event-driven architecture
- Optimized system performance to handle over 1M+ requests per month, utilizing Kafka to decouple service, enable asynchronous processing, and improve request throughput under peak traffic conditions

Software Engineer Intern (Rochester Institute of Technology, Rochester, NY, US)   May 2023 – Dec 2023
- Developed Spring Boot microservices for Warehouse Management System, optimizing inventory tracking and order fulfillment by designing RESTful APIs for real-time stock updates and automated order processing
- Integrated Azure Synapse Analytics for warehouse analytics, enhancing inventory forecasting, stock level insights, and order trend analysis, leading to $50,000 in operational savings through optimized decision-making for warehouse managers
- Built and containerized microservices architecture using Docker and Kubernetes, improving system uptime and ensuring high availability of inventory and order data. Streamlined deployments by implementing CI/CD pipelines

Software Engineer (MAQ Software, Hyderabad, Telangana, India)   Jan 2019 – Apr 2021
- Improved operational efficiency and service reliability for Starbucks partners across 30k stores by implementing real-time system monitoring, automated alerts, and logging mechanisms for profile updates, store access issues, and role transitions
- Engineered and implemented a comprehensive monitoring system using Splunk, ServiceNow, ITSM, Grafana, Prometheus, and custom C# tools; minimized incident resolution time by 40% while maintaining optimal service availability for over 500k partners
- Achieved a personal target by reducing backlog on priority tickets below 5 open cases daily while ensuring compliance with internal SLAs during routine operations without additional resources or team adjustments necessary
- Deployed containerized microservices using Docker and Kubernetes, ensuring fault tolerance, high availability, and proactive system monitoring during peak operational hours
- Automated deployment workflows using Jenkins and Azure DevOps, reducing manual operational toil, improving deployment efficiency, and ensuring resilient system updates

Skills

- **Programming Languages:** Python, Java, C, C++, JavaScript, TypeScript, HTML, CSS
- **Web Development Frameworks:** Spring Boot, React.js, Next.js, Fast API, Django, RESTful APIs
- **IDEs and Version Control Tools:** PyCharm, IntelliJ, Eclipse, Visual Studio Code, Git, Gradle, Maven
- **Databases:** SQL (MySQL, SQL Server, Oracle DB), NoSQL (MongoDB, Cassandra)
- **Monitoring Tools:** Splunk, Prometheus, Grafana, ServiceNow, ITSM
- **Cloud & Big Data:** Azure, AWS, GCP, Apache Kafka, Redshift, Power Automate, Power Query, Power BI
- **Testing and Quality Assurance:** Junit, Mockito, Unit & Integration Testing
- **Coursework:** Data Structures & Algorithms, Big Data, Object Oriented Programming (OOP), AI/ML, Distributed Systems

Projects

Pub-Sub Model — Python, Docker — ⌂ GitHub Link ⧉
- Built a distributed file system using a publish-subscribe model, ensuring fault tolerance and scalability for large data volumes
- Reduced response time by 30% by utilizing Docker for real-time communication between nodes, enhancing system reliability

Movie Reviews App — React, Spring Boot, MongoDB — ⌂ GitHub Link ⧉
- Developed a full-stack movie app using React and Spring Boot, enhancing user experience with an interactive interface
- Implemented RESTful APIs for submitting and viewing movie reviews, ensuring efficient client-server interaction
- Integrated MongoDB for scalable data storage, supporting an increasing volume of movie reviews

Education

Master of Science in Computer Science (Specialization: Big Data Analytics)   Aug 2021 – Dec 2023
Rochester Institute of Technology, Rochester, New York, United States

Bachelor of Technology in Computer Science (Specialization: Networks and Security)   Aug 2015 – Jul 2019
Manipal Institute of Technology, Manipal, Karnataka, India