MAHESWAR REDDY CHILLARI

+1 (716) 398 6783 | mailto:maheswarreddysai@gmail.com | LinkedIn

SUMMARY

Dynamic and results-driven Software Engineer with over 3+ years of experience in designing and deploying high-performance distributed systems and scalable backend solutions using C++, Java, and Python. Expert in developing fault-tolerant architectures, optimizing system reliability, and driving scalability for mission-critical applications in cloud environments. Skilled in real-time performance monitoring, multithreading, and API development, with a proven track record of delivering innovative solutions that meet high-frequency data processing demands. Adept at collaborating with cross-functional teams to solve complex technical challenges and exceed business objectives.

EDUCATION

Master of Science - Data Science | University at Buffalo, The State University of New York Dec 2023
Relevant Coursework: AI & Machine Learning, Cloud Computing, Python, C++, Big Data Technologies, Advanced Analytics

TECHNICAL SKILLS

Programming Languages: Python, C, R, C++, JSON-RPC, Scala, Java, Unix Shell Scripting, React
Database Systems: SQL (MySQL, PostgreSQL), Redshift, MongoDB, Teradata, Netezza, BigQuery Cosmos DB
Distributed Systems: High-performance storage, databases (B+ trees, query optimization), lock-free programming
Cloud Platforms: Azure (Azure ML, Azure Databricks, Azure GPU instances, Azure Synapse, Azure Data Factory, Azure Data Explorer), AWS (EC2, S3, SageMaker, EMR, Glue, Redshift, Spectrum, Athena, QuickSight), GCP
iOS Development: Swift, UIKit, SwiftUI, Core Data, HealthKit, UserNotifications
Data Processing & Analytics: PySpark, ETL, Data Warehousing, Hadoop, Spark, Apache Kafka, Apache Hive, Data Modeling
Performance Optimization: Experience with GPUs, low-latency systems, and fault-tolerant architectures
Backend Development: REST APIs, multithreading, database optimization, Test-Driven Development (TDD) Development
Frameworks & Methodologies: Agile (Scrum, Kanban), Continuous Delivery Practices
Control & Collaboration Tools: Git, Confluence, Trello, GitHub, Docker, Kubernetes, ITIL framework ZFS storage clusters
Other Skills: Documentation, Team Collaboration, Qlik, Troubleshooting, Data Warehousing, Data Analysis, Data Visualization

WORK EXPERIENCE

MetLife, USA | Software Engineer **Jan 2024 – Present**

- Led and implemented distributed financial data processing systems using C++ and object-oriented programming principles to handle terabyte-scale datasets, improving system efficiency by 50% and ensuring high availability under peak load conditions.
- Developed lock-free algorithms for backend systems, improving concurrency by 40% and reducing contention in high-frequency transaction processing while adapting to changing project requirements.
- Developed complex data models and implemented advanced DAX measures in Power BI, creating interactive dashboards that provided real-time insights into financial performance, resulting in a 30% improvement in decision-making speed.
- Built and deployed RESTful APIs in Java and ASP.NET Core to enable seamless integration with enterprise applications, optimizing throughput by 25% and enhancing scalability for production workloads.
- Spearheaded the design of a real-time monitoring and alerting framework using Azure Monitor and KQL (Kusto Query Language), enabling proactive detection and troubleshooting of performance bottlenecks, reducing downtime by 30%.
- Migrated legacy database systems to Azure Synapse Analytics, improving query execution times by 60% and reducing operational costs through optimized storage solutions, showcasing strong customer focus by minimizing service disruptions.
- Designed and deployed a distributed caching mechanism using Redis and C++ to optimize data retrieval speeds, reducing query latency by 40% and improving system responsiveness for high-frequency financial transactions.
- Developed a data consistency and anomaly detection system using C++ and Azure Machine Learning, reducing fraud detection time by 25% and increasing compliance reporting accuracy by 30%, while influencing cross-team adoption of best practices.
- Optimized SQL queries and revamped database schemas in PostgreSQL to boost performance by 45%, while automating CI/CD pipelines with Azure DevOps and Kubernetes, reducing production errors through rigorous code reviews and testing.
- Collaborated with cross-functional teams, business analysts, and compliance officers, to align technical solutions with business requirements and ensure the successful delivery of mission-critical projects, demonstrating strong problem-solving skills.

iView Labs Pvt Ltd, India | Software Engineer **May 2020 – Jul 2022**

- Led development of distributed backend systems using C# and .NET Core for healthcare applications, ensuring scalability and reliability for critical patient data workflows while conducting thorough debugging sessions.
- Utilized Power BI and DAX to design a comprehensive reporting solution, integrating data from multiple sources and creating custom visualizations that increased data accessibility for stakeholders by 40% and streamlined monthly reporting processes.
- Architected real-time data processing pipelines using Azure Databricks, Spark SQL, and Kubernetes to analyze terabyte-scale healthcare datasets, achieving a 45% improvement in system efficiency and reduced processing times for medical records.
- Designed a robust anomaly detection framework using Python, Azure Machine Learning, and object-oriented design patterns to identify irregularities in patient data, reducing error rates and ensuring compliance with healthcare regulations.
- Built RESTful APIs to streamline communication between microservices-based architectures for healthcare platforms, improving system interoperability and demonstrating adaptability in a rapidly evolving technical landscape.
- Implemented distributed caching solutions using Redis and ASP.NET Core to optimize data retrieval speeds by 30%, enhancing responsiveness for critical healthcare operations during peak usage periods and showcasing strong customer focus.
- Optimized database schemas in SQL Server to improve query performance by 50%, ensuring faster access to electronic health records (EHRs) during periods of high demand across hospital networks, while consistently participating in code reviews.
- Mentored junior engineers on best practices for software development, cloud technologies, and troubleshooting techniques, improving team productivity by 25% and enabling faster delivery timelines for healthcare analytics projects.

CERTIFICATIONS

Microsoft Certified: Azure Data Engineer Associate | AWS Certified Cloud Practitioner | GCP Professional Data Engineer