

GIRISHKUMAR PATCHIKORU

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Skills

Programming Languages Python, Java, JavaScript(ES6+), TypeScript, SQL(MySQL, PostgreSQL), NoSQL(MongoDB, Cassandra)
Frameworks & Libraries React.js, Next.js, Node.js, Redux, Spring Boot, TensorFlow, PyTorch, REST/GraphQL
Cloud & DevOps AWS (lambda, S3, EC2, CloudFormation), Azure, GoogleCloud(GCP), Docker, Kubernetes, Terraform, Jenkins, CI/CD
Databases PostgreSQL, MongoDB, Redis, BigQuery, DynamoDB, Cassandra
Tools & Technologies Git, Jira, Apache Kafka, Spark, Prometheus, Ansible, Nginx, Webpack
System Design Microservices, Distributed Systems, Load Balancing, Sharding, Event-Driven, Architecture, API Design

Experience

Texas A&M University, Information Technology June 2024 – Present
IT System Student Support *Texas A&M University-Corpus Christi, TX*
• Performing Information Technology Service Desk support including troubleshooting functions over the telephone and in person for TAMU-CC faculty, staff, students, contractors, and guests. Enhancing documentation accuracy and user satisfaction through meticulous troubleshooting and support.
• Streamlined communication protocols and optimized administrative workflows by implementing automated systems and advanced email management tools, increasing operational efficiency by up to 40% and ensuring seamless IT service delivery.

Icertis Solution Pvt Ltd, DevOps Team Feb 2022 – Aug 2023
Associate Software Engineer *Pune, India*
• Backend Optimization & Automation – Led optimization efforts within the Core Platform DevOps team, reducing backend workload and improving system efficiency by automating Build Deployment failure resolutions.
• Feature Development & Efficiency Boost – Introduced a new feature in the ICM version section of Build Deployment using a String feature, minimizing effort and enhancing workflow efficiency.
• System Stability & Data Management – Designed a Backup & Deletion strategy for the Operational Data Store (ODS), ensuring data integrity and optimizing storage management while improving overall system stability.
• Cross-Team Collaboration & Issue Resolution – Provided critical support to 50+ internal product and delivery teams, swiftly resolving failures and addressing backlog issues to ensure uninterrupted operations.
• Testing, Documentation & Infrastructure Development – Conducted thorough codebase testing, created comprehensive documentation, and played a key role in developing new infrastructures for testing Power BI report deployments.

Tata Consultancy Services Ltd, Core Java Aug 2021 – Jan 2022
Associate Software Engineer *Hyderabad, India*
• Legacy Modernization: Led migration of a monolithic telecom application (100K+ users) to a Spring Boot microservices architecture, improving API throughput by 35% and enabling 30% faster feature delivery.
• Performance Tuning: Upgraded a 7,000-line JavaScript codebase to ES6 standards, reducing runtime memory usage by 25% and earning a Spotlight Award for technical excellence.
• Database Optimization: Restructured Oracle DB schemas and queries, reducing average query latency from 2s to 200ms and supporting 10x user growth without infrastructure scaling.

Projects

Distributed E-Commerce Platform- Cross Connect
React, Node.js, AWS, Kafka, Kubernetes *[GitHub]*
• Architected a high-traffic platform handling 100,000+ concurrent users with real-time inventory tracking, order processing, and payment workflows, achieving 99.99% uptime via AWS auto-scaling and Kubernetes-managed microservices.
• Reduced API latency by 45% through Redis caching and Kafka-powered event-driven architecture.
• Implemented machine learning-based fraud detection (Python/TensorFlow), decreasing fraudulent transactions by 30%.

Real-Time Geospatial Analytics Engine Data Visualization Tool
Python, Spark, Google Cloud, BigQuery *[GitHub]*
• Built a distributed data pipeline processing 1TB/day of geospatial data using Apache Spark, reducing ETL latency by 60% through parallelized coordinate transformations.
• Visualized insights with dynamic Mapbox dashboards, enabling Fortune 500 clients to optimize logistics routes and cut fuel costs by 25%. Integrated anomaly detection (PyTorch) to flag irregular patterns with 92% accuracy.

Education

Texas A&M University Aug. 2023 – Present
Master of Science, Computer Science - GPA (3.83/4) *Corpus Christi, Texas, USA*
• Relevant Coursework: Design and Analysis of Algorithm, Advanced Software Engineering, Machine Learning, Deep Learning.

Involvements

National Society of Leadership and Success : Student Member, Texas A&M Chapter
Microsoft TEALS Program : Teaching Assistant Fellow for high school computer science classes
IEEE and Islander Cyber Society : Student Member contributed to various organizational events and initiatives.