

SUNIL KUMAR DAS

Roswell, GA | 470-546-1742 | sunilkdas@proton.me | <https://www.linkedin.com/in/sunilkdas>

PROFESSIONAL SUMMARY

Technical Leader with 10+ years building microservices systems that serve enterprise supply chain and logistics companies. Led 11 engineers across 2 teams, delivering 20+ features with 99.9% uptime. Reduced system load times by 87%, cut API costs by 70%, and built distributed caching architecture handling 100,000+ concurrent operations. Strong background in transportation management systems (TMS), including route optimization, fleet management, and real-time tracking platforms.

CORE TECHNICAL SKILLS

Languages & Frameworks: Java 8/11/17, Python, Spring Boot, Spring Cloud, Spring MVC, Hibernate, JPA, REST APIs, RESTful Web Services, Microservices Architecture, Event Driven Architecture, Spring Security, Design Patterns, Object-Oriented Programming (OOP), Multithreading, Concurrency

Cloud & Infrastructure: AWS (EC2, S3, Lambda, RDS, VPC, IAM), GCP (Compute Engine, Cloud Storage, Cloud Functions), Google Pub/Sub, Docker, Kubernetes (K8s), Helm, Terraform, Jenkins, GitHub Actions, CI/CD Pipelines

Data & Messaging: Oracle SQL, PostgreSQL (pgvector), MongoDB, MySQL, NoSQL, IBM MQ, Apache Kafka, RabbitMQ, ActiveMQ, Hazelcast, HikariCP, Database Design, SQL Optimization, Data Modeling, Vector Databases

DevOps & Monitoring: Dynatrace, Splunk, New Relic, Elasticsearch (ELK Stack), Kibana, Grafana, Prometheus, Solr, PagerDuty, Log4j2, SLF4J, Maven, Gradle, Git, Bitbucket, GitHub, kubectl, Ambassador, APM Tools

Architecture & Design: System Design, Distributed Systems, Scalability, High Availability, Fault Tolerance, Event-Driven Architecture, SOLID Principles, Service-Oriented Architecture (SOA), API Gateway, Load Balancing, Caching Strategies, SRE Practices

Supply Chain & Domain: TMS (Transportation Management Systems), Route Optimization, Real-time Tracking, Fleet Management, Carrier Management, EDI Integration, Transportation Optimization, Logistics Platforms, Shipment Visibility, Order Fulfillment, ETA Calculation

Leadership & Process: Technical Leadership, Team Lead, Engineering Management, Mentorship, Coaching, Architecture Reviews, Technical Documentation, Agile/Scrum, Kanban, Sprint Planning, Stakeholder Management, Cross-Functional Collaboration, Hiring & Interviewing, Performance Reviews

Security & Compliance: OWASP Top 10, Secure Coding, OAuth2, JWT, SAML, Active Directory, LDAP, HIPAA, GDPR, CCPA, Section 508/WCAG Accessibility, CVE Remediation, PHI/PII Protection

Testing & Quality: JUnit, Mockito, TestNG, Selenium, TDD/BDD, Unit Testing, Integration Testing, End-to-End Testing, Code Reviews, Static Code Analysis, SonarQube, Performance Testing, Load Testing, Production Support, Incident Management

PROFESSIONAL EXPERIENCE

Lead Engineer – Manhattan Associates (US-based Supply Chain SaaS) – 2020 – Present

Team Leadership & Technical Direction

- Lead and mentor 11 engineers across 2 squads through 1-on-1s, code reviews, and architecture discussions for microservices TMS platform
- Reduced Mean Time to Resolution 45% and production defects 60% through code review standards, OWASP security practices, and root-cause analysis
- Set technical direction for platform serving 100K+ concurrent trips; run sprint planning, story breakdown, and ensure on-time Agile/Scrum delivery
- Review architecture designs to maintain security standards, catch issues early, and minimize technical debt across distributed system
- Established engineering excellence culture improving team velocity 40% and reducing escaped defects from 15/month to 6/month

Performance & Cost Optimization

- Reduced load times 87% (15s → 2s) for 100K+ concurrent trips by redesigning caching with Hazelcast and optimizing HikariCP connection pooling
- Cut external API costs 70% (\$150K+ annual savings) through intelligent cache layer for PC*MILER routing calls, reducing call volume from 5M to 1.5M monthly
- Implemented gRPC for service-to-service communication, improving latency 65% (240ms → 85ms) and throughput 3x in critical TMS workflows
- Optimized database queries and indexing strategy, reducing database CPU utilization 55% and supporting 2x user growth without infrastructure scaling
- Designed auto-scaling strategy for peak auction events, handling 10x traffic spikes while maintaining sub-100ms P95 response times

Platform Architecture & Integration

- Built real-time tracking system integrating OBD devices and GPS serving 50K+ daily shipments with live updates and dynamic ETA calculations
- Integrated OAuth2/SSO with enterprise identity management, securing access for 100K+ TMS users across North American carrier network
- Created compliance-ready auditing framework with transaction trails processing 2M+ daily events meeting US DOT regulatory requirements
- Developed EDI data pipeline with invoice generation processing 500K+ monthly transactions, tax validation, and carrier acceptance algorithms
- Architected event-driven system with Kafka handling 10M+ daily events, enabling real-time analytics and reducing data staleness from hours to seconds

Mobile & DevOps Innovation

- Led TMS Mobile app (Ionic/Angular) from 0→1, now used by 5K+ drivers daily, integrating 25+ backend APIs with Firebase real-time updates

- Built Jenkins CI/CD pipeline with security scanning, reducing deployment time 95% (3 days → 2 hours) and enabling weekly production releases
- Implemented Dynatrace monitoring and PagerDuty alerts with SLOs/SLIs tracking 200+ APIs, catching 85% of issues before customer impact
- Set up remote debugging with Telepresence, reducing production troubleshooting time 70% (4 hours → 1.2 hours average resolution)
- Configured Elasticsearch/Solr search on AWS with auto-scaling, handling 1M+ daily queries with 99.9% availability

Platform Modernization & Technical Debt

- Led Spring 5, Hibernate 5, Java 11 upgrade across 500K+ LOC codebase with zero downtime, fixing 40+ security vulnerabilities and improving throughput 30%
- Refactored monolithic services into 15 microservices, reducing deployment risk and enabling independent team deployments
- Implemented feature flags with LaunchDarkly enabling gradual rollouts, reducing rollback incidents 80% (10/quarter → 2/quarter)
- Migrated legacy SOAP services to REST/GraphQL APIs, improving API response times 60% and reducing integration complexity for clients
- Established technical debt backlog process, retiring 3 legacy systems and reducing maintenance costs \$200K+ annually

Cross-Functional Leadership & Delivery

- Partner with Product, UX, and Customer Success translating business requirements into technical solutions for Fortune 500 logistics clients
- Present technical roadmap and architecture decisions to VP Engineering and CTO, securing \$1.5M+ in platform investment
- Lead on-call rotation for P1/P2 incidents serving 500+ enterprise clients, running incident response and blameless post-mortems
- Mentor 6 junior engineers advancing 3 to senior engineer roles through technical coaching and career development planning
- Collaborate with DevOps on capacity planning and infrastructure optimization, reducing GCP costs 35% (\$400K+ annual savings)

Engineer II — J.C. Penney (Major US Retailer) — 2020

- Delivered 40% web application performance improvement through asynchronous loading, CDN optimization, and resource delivery enhancements for high-traffic e-commerce platform
- Collaborated with cross-functional Agile team of 8+ engineers based in Plano, TX, participating in sprint ceremonies, technical discussions, and quality assurance
- Mentored junior developers on JavaScript best practices, performance optimization techniques, and web accessibility standards (WCAG 2.1)

Associate — Cognizant (Etihad Airways Client Engagement) — 2019 – 2020

- Developed fault-tolerant REST APIs for airline consent-management platform with 99.9% uptime, supporting global passenger data privacy and regulatory compliance
 - Partnered with compliance and legal teams to ensure GDPR, CCPA, and international aviation regulatory readiness, implementing robust error handling and comprehensive audit logging
 - Built scalable backend workflows handling passenger consent requests across multiple jurisdictions, meeting aviation industry data protection standards
 - Contributed to technical design discussions and code reviews, advocating for scalability, maintainability, and adherence to enterprise architecture standards
-

Technology Analyst – Infosys (Aetna Healthcare Client) – 2015 – 2019

- Built enterprise authentication and authorization system (Spring Security, Active Directory/LDAP, JWT) serving 50,000+ healthcare users with 99.95% availability, ensuring HIPAA compliance
 - Led development of role-based access control (RBAC) framework compliant with HIPAA and healthcare security policies, collaborating with InfoSec and compliance teams on requirements and implementation
 - Developed secure, responsive web interfaces with HTML5/CSS3/Bootstrap ensuring Section 508 accessibility compliance for healthcare applications and cross-browser compatibility
 - Implemented security controls for protected health information (PHI) access, including audit logging, session management, and secure authentication workflows
 - Mentored 3 junior engineers on Spring framework, secure coding practices (OWASP), healthcare compliance requirements, and enterprise development standards
-

EDUCATION

Bachelor of Technology — Electrical & Electronics Engineering | IIIT Bhubaneswar | CGPA: 8.35/10

PERSONAL PROJECTS

AI-Powered Audiobook Generator | Personal Project | Python, Docstring, PostgreSQL pgvector, Embeddings, TTS

- Built intelligent web content extraction and summarization system using Docstring for document parsing and embedding agents for semantic understanding
 - Implemented PostgreSQL vector database (pgvector) with embedding-based retrieval for efficient content processing and context-aware summarization
 - Developed end-to-end pipeline converting web pages to MP3 audiobooks: web scraping → content extraction → AI summarization → text-to-speech conversion
 - Explored cutting-edge AI/ML technologies including vector embeddings, semantic search, and RAG patterns for real-world application
-

LEADERSHIP & AWARDS

- **Manhattan Associates** — Star of the Quarter for outstanding technical leadership, innovation, and team impact
- **Infosys** — Zircon Award for exceptional performance and significant contributions to project success
- **Mentorship:** Guided 11 engineers through career growth, technical skill development, and leadership opportunities
- **Hiring:** Interviewed 25+ candidates, providing technical assessment and cultural fit evaluation