

SANTOSH KUMAR DUBEY

Technical Architect | Engineering Leadership & Platform Ownership | AI-Augmented Software Architect

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Platform Architect with 12+ years designing mission-critical systems. Scaled Limitless platform to **40,000+ users** processing **millions of requests globally with 99.99% uptime**. Pioneer in **AI integration** (classification, summarization, suggestion engines) and **agentic development** using Claude & GPT with precise specifications. Complete **platform ownership** — from serverless architecture to security audits & penetration testing. Led distributed teams remotely for 8+ years with strong code review discipline and knowledge sharing culture.

AI IMPLEMENTATION — PRODUCTION

Limitless Technology: Integrated ChatGPT API into production platform for **intelligent text classification**, **context summarization**, and **smart suggestion engine** — powering real user-facing features at scale.

AGENTIC DEVELOPMENT — POWERED BY AI

Claude Opus & Sonnet — Complex reasoning, architecture design, code generation

Cursor AI — Accelerated development with in-depth agent control

Spec-Driven Approach — Precise specifications & guardrails to prevent hallucination and tech debt

CORE STRENGTHS

Cost Optimization

Right-sizing infrastructure, identifying over/under-provisioned resources, reducing cloud spend without compromising performance

High-Throughput Architecture

Designing serverless systems for maximum throughput with minimal latency and optimal resource utilization

Security & Compliance

Penetration testing, security audits, IAM best practices, encryption, and zero-trust architecture

Self-Healing Systems

Architecting fault-tolerant components with automatic recovery, data integrity repair scripts, and proactive alerting

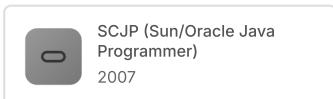
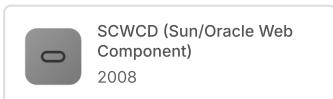
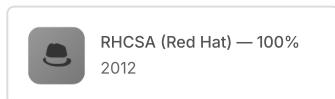
E2E DevOps & CI/CD

Zero-touch deployments, automated testing pipelines, infrastructure as code

Engineering Leadership

Leading high-performance remote teams, setting coding standards, defining testing approaches, mentoring engineers

CERTIFICATIONS



PROFESSIONAL EXPERIENCE

Technical Architect

May 2017 – Present (8+ Years)

Limitless Technology (limitlesstech.com) — Unilever-backed UK Startup | Remote

Progression: Senior Platform Developer → Lead Platform Developer → Technical Architect

Platform Ownership & Architecture

- **Scaled platform to 40,000+ users** processing millions of requests from businesses worldwide with **99.99% uptime**
- **Full platform ownership** — sole architect responsible for technical direction, system design, and long-term scalability of the entire product
- **Designed high-throughput event streaming pipelines** using DynamoDB Streams, Lambda triggers, and SQS for real-time data processing at scale
- **Built serverless microservices architecture from scratch** — established foundational patterns, coding standards, and best practices still in use today

Cost Optimization & Performance

- **Led cloud cost optimization initiatives** — built custom tooling to analyze over/under-provisioned resources, identified waste, and reduced AWS spend significantly
- **Optimized Lambda concurrency and DynamoDB capacity** — tuned provisioned vs on-demand capacity, implemented auto-scaling strategies
- **Data warehouse optimization** — query tuning, efficient indexing, cost-effective storage tiering, and archive strategies

Security Architecture

- **Led penetration testing and security audits** — identified vulnerabilities, implemented fixes, maintained platform security posture
- **Designed secure API architecture** with Cognito authentication, OAuth 2.0 flows, and fine-grained IAM policies
- **Implemented secrets management** using AWS Secrets Manager with automatic rotation
- **Established security best practices** — least privilege access, encryption at rest/transit, VPC configurations

Self-Healing & Reliability

- **Architected self-healing systems** with automatic failure detection, recovery mechanisms, and graceful degradation
- **Built data integrity repair scripts** — automated tools to detect and fix data inconsistencies across distributed systems
- **Implemented comprehensive monitoring** with X-Ray tracing, CloudWatch alarms, and proactive alerting for anomaly detection
- **Production support ownership** — first responder for P1 incidents, root cause analysis, and post-mortem improvements

Engineering Leadership & DevOps

- **Led distributed engineering team remotely** — mentored engineers, conducted code reviews, and fostered high-performance culture
- **Established coding standards and testing benchmarks** — defined testing strategies, reviewed test cases, enforced quality gates
- **Built E2E CI/CD pipelines** with CodeCommit, CodeBuild, CodeDeploy — achieving zero-touch deployments
- **Infrastructure as Code** — all resources managed via CloudFormation for reproducibility and version control
- **Third-party integrations** — built connectors for client CRM systems and external APIs

AWS Lambda • API Gateway • GraphQL/AppSync • DynamoDB • DynamoDB Streams • Cognito • Step Functions • SQS • SNS • S3 • CloudFormation • CodePipeline • X-Ray • Node.js

Technical Lead

Sep 2015 – May 2017

Gateway Technolabs, Ahmedabad

Client: ZKTeco — World's Largest Biometric Device Manufacturer | Onsite + Remote (USA)

- **Re-architected monolithic application to SaaS-ready cloud solution** — enabled multi-tenant deployment and horizontal scaling
- **Designed cloud migration strategy** — assessed on-premises infrastructure, created phased migration plan to AWS
- **Database optimization** — restructured schemas for multi-tenancy, improved query performance

Java • MySQL • iBatis • Spring • JSF • AWS IaaS

Client: Limitless — Greenfield Platform Development | Remote

- **Co-architected the entire Limitless platform from scratch** — designed serverless foundation that scaled to production
- **Established architectural patterns** — API design, data modeling, error handling conventions

AWS Lambda • API Gateway • DynamoDB • Cognito • Serverless • Node.js

Software Developer / Deployment Lead

Sep 2013 – Sep 2015

[SBSC \(sbsc.com\) — Client: Walmart | Onsite + Remote \(USA\)](#)

- **Led software deployments to 6,000+ retail stores** across multiple geographic regions with zero-downtime rollout strategy
- **Designed deployment automation** — reduced manual intervention, improved release reliability
- **Refactored legacy applications** — improved code maintainability, performance, and test coverage
- **Cross-functional collaboration** — worked with operations, QA, and business teams for smooth releases

Java • REST API • MySQL • Hibernate • Spring • Deployment Automation

Software Developer

Nov 2012 – Jul 2013

[TBS \(technologyblueprint.co.uk\) — Product: Propco](#)

- **Built mobile application from early stage** — developed UI components and RESTful backend services
- **API design** — created clean REST endpoints for mobile consumption

Java • EJB • jQuery Mobile • MySQL • REST API

Trainer / Software Developer

Oct 2010 – Nov 2012

[NIIT Technologies — Onsite \(Bhutan\), Sherubtse College](#)

Project: Chhipen Rigel — National IT Literacy Initiative (Funded by Indian Govt.)

- **Developed 4 custom learning and utility tools** — adopted by college students, professors, and citizens across Bhutan
- **Technical training** — conducted classes for graduation students, accelerating IT literacy nationwide
- **Full ownership** — requirements gathering, design, development, and deployment

Java • MySQL • Java Swing • JFC • Java 2D

Software Programmer

Jun 2008 – Oct 2010

[Futura Softech Solutions & Sunbios Software Development, Gurgaon/Ghaziabad](#)

- **Built Java web applications** — developed strong fundamentals in server-side development, database design, and web technologies

Java • JDBC • MySQL • JSP • Servlets

TECHNICAL SKILLS

Languages & Frameworks

JavaScript (8+ yrs) Python (2+ yrs) Java (8+ yrs)
Node.js (8+ yrs) Spring Hibernate

Databases

DynamoDB (5+ yrs) MySQL MongoDB NoSQL Design

Architecture & APIs

Serverless (5+ yrs) Microservices REST API GraphQL
Event-Driven

DevOps & Quality

CI/CD Pipelines Infrastructure as Code
Agentic Development Testing Strategy Code Review

AWS Services — SDK-Level Production Implementation

Compute: Lambda, ECS, EC2 | **Storage:** S3, DynamoDB, RDS | **API:** API Gateway, AppSync/GraphQL | **Security:** IAM, Cognito, Secrets Manager | **DevOps:** CodeCommit, CodeBuild, CodeDeploy, CloudFormation | **Messaging:** SNS, SQS, SES, IoT Core | **Monitoring:** X-Ray, CloudWatch | **Other:** CloudFront, Step Functions, DynamoDB Streams, Rekognition

EDUCATION

GNIIT – Software Engineering	2008
NIIT South Ex, Delhi	
Bachelor of Arts (BA)	2005
Magadh University, Bihar	
10+2 I.Sc (Science)	2001
Bihar Intermediate Education Council	

BEYOND WORK

Outside of technology, I find balance through road trips, outdoor walks, fitness, and music. I believe in continuous exploration — both in code and in life — which keeps me curious, energized, and grounded.