

# MUKESH KUMAR SAH

Staff SDET | AI Quality Strategy | SDET COE | Engineering Manager

+91-8596932656 @ kumarmukeshsah1996@gmail.com linkedin.com/in/mukesh-kumar-sah

https://mukesh-sdet.vercel.app/ Bengaluru, India

## SUMMARY

As a Staff SDET and Engineering Manager with 8+ years in quality engineering, I lead global teams to deliver innovative automation solutions across AI, retail, insurance, and healthcare sectors. I design and implement scalable quality architectures that reduce release cycles and improve defect detection by over 40%. Skilled in driving enterprise-wide QA strategies, I excel in leveraging cutting-edge AI tools and cloud platforms to elevate product reliability and accelerate delivery.

## EXPERIENCE

### Staff SDET (Engineering Manager)

#### Telus Digital (Computer Vision & AI)

01/2024 Bengaluru, India

Focuses on computer vision and AI solutions

- Led and mentored a 25-member global SDET team across 3 countries, managing org design, hiring, OKRs, governance, and career growth for AI Data Solutions.
- Architected and launched centralized QA Dashboard using Next.js, Spring Boot, AWS, PostgreSQL, reducing release validation time by 40% and enabling same-day signoff.
- Pioneered autonomous QA agents using LangChain and RAG, adopted by 10+ engineers to generate Test Cases, BDD feature files, scenarios, and boilerplate code.
- Defined enterprise LLM quality evaluation strategy covering prompt correctness, hallucination detection, safety guardrails, and response consistency for AI models.
- Built a high-throughput inference API benchmarking suite validating 10,000+ TPM workloads across multi-region Kubernetes clusters at Telus Digital.
- Established unified automation standards across 10 cross-functional teams, improving defect detection by 45% and achieving 95% test coverage on web and mobile.

### Associate Staff Engineer

#### Nagarro (Walmart Labs)

06/2021 - 01/2024 Bengaluru, India

Provides IT services and solutions to Walmart

- Reduced enterprise test data provisioning time by 70% by architecting a Test Data as a Service platform with Spring Boot and OpenAPI/Swagger at Walmart Labs.
- Defined quality architecture and release strategy for Walmart retail platforms supporting ASDA UK and Massmart South Africa.
- Ensured data integrity across high-volume retail workflows by instituting Kafka event validation and asynchronous stream quality checks handling millions of events per day.
- Drove shift-left testing adoption, integrating quality gates into CI/CD and improving deployment confidence for retail releases.
- Accomplished over 85% API test coverage by scaling Rest Assured automation and integrating JMeter performance suites into CI pipelines for Walmart Labs.

## KEY ACHIEVEMENTS

### Operational Excellence Award - Telus (2025)

Led QA transformation improving release cycles by 40% at Telus

### Brightest Mind Excellence - Nagarro (2023)

Architected Test Data as a Service platform reducing provisioning time by 70%

### Best Find of the Year - Cognizant (2019)

Recognized for automation utility development

## SKILLS

### AI Quality Engineering

LangGraph LangChain RAG

Prompt Evaluation LLM Benchmarking

Hallucination Guardrail Safety

### Quality Architecture & Automation

Selenium WebDriver Playwright Appium

Rest Assured WireMock Cypress

Cucumber (BDD) TestNG JUnit

PyTest Contract Testing Apache JMeter

Java JavaScript Python Postman

Load Testing Protractor

### Database & Data Validation

JDBC SQL MongoDB PostgreSQL

BigQuery Kafka

### Platform & Backend Engineering

Spring Boot Next.js TypeScript

Microservices OpenAPI/Swagger

## EXPERIENCE

---



### Senior Software Test Engineer

#### Mindfire Solutions (NaviHealth)

📅 02/2020 - 06/2021 📍 Bhubaneswar, India

Provides healthcare technology solutions

- Reduced manual regression testing efforts by 40% by designing scalable UI automation frameworks with Protractor and JavaScript at Mindfire Solutions.
- Achieved 90% regression testing coverage and lowered integration defects by 35% by implementing enterprise-grade API automation using Rest Assured.
- Increased mobile regression coverage to over 80% by scaling Appium based cross-platform automation for iOS and Android validation.
- Boosted shift-left quality practice adoption by 60% by collaborating with product and engineering teams to institutionalize quality processes.



### Programmer Analyst

#### Cognizant (MassMutual)

📅 06/2018 - 01/2020 📍 Kolkata, India

A multinational corporation providing IT services

- Increased UI regression test coverage to 80%+ by delivering Selenium WebDriver and TestNG accelerators for insurance validation.
- Achieved over 90% service validation coverage by implementing BDD-driven accelerators with Rest Assured and Cucumber for rule engine.
- Decreased manual PDF verification effort by 60% by creating a custom validation utility using Apache PDF Box.

## SKILLS

---

### Observability & Analytics

Grafana ELK Splunk BigQuery

LangFuse Prometheus Datadog

### Test Observability Dashboards

Release Metrics Quality KPIs

### Google Analytics

---

### Cloud, DevOps & Reliability

AWS GCP Docker Kubernetes

Jenkins GitHub Actions SonarCloud

### CI/CD Quality Gates

## EDUCATION

---



### B.Tech in Electrical & Electronics Engineering

#### Silicon Institute of Technology

📅 07/2013 - 05/2017 📍 Bhubaneswar, India