# Shubham Mallick

13+ Years Experience | Data & Application Architect | ML & Performance Engineering

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🛂 US B1/B2 Visa

🏆 Qualcomm Hackathon, Innovation Maestro, & Super-Qualstar Winner, Top 3 ML Contestant Worldwide | Apple / PwC Awardee | Microsoft / IBM Certified 🏆

## EXECUTIVE SUMMARY 💡

**13+ years** seasoned Engineering Leader specializing in scalable application and data platforms, ML/AI solutions, and high-performing team leadership. Delivered systems processing **50M+ records daily** with **70% latency reduction**. Expert in Software / Data Engineering, Cloud Migration, Microservice based Architectures, and Real-time Analytics across Salesforce, Apple, Qualcomm, IBM, PwC ecosystems.

## PROFESSIONAL EXPERIENCE 💼

### Salesforce
**Senior Staff Engineer, Performance Engineering, Sales AI**
Jul 2022 - Aug 2025

*AWS • Spark • Kafka • Redis • Python • Go • Airflow • GenAI • LLM • Agentforce • NoSQL • Graph DB • S3 • Lambda • Docker • Kubernetes*

- Redesigned distributed microservice based ticketing system for Security Operations, reducing response time by **45%**
- Significant contribution to distributed data pipelines achieving **70% latency reduction** with Spark/EKS/Kafka
- Enhanced application/database performance by **20-40%** through GenAI integration and Agentforce prompt engineering
- Worked on CI/CD automation (EKS/Terraform/Jenkins), cutting deployment time by **70%**
- Worked on Agentforce performance engineering evaluation and achieved **25-40%** improvement using GPT4o

### Apple Inc.
**Technical Lead, Module Owner**
Jun 2020 - Jul 2022

*Apple Cloud • AWS • Python • Django • Kafka • Redis • PySpark • Snowflake • Oracle • Docker • Kubernetes • EMR • EC2 • S3*

- Led **12-member team** in Supply-Chain CPT projects, key player of GA application, awarded as key contributor
- Architected backend pipeline processing **100GB+ daily** from Oracle DW to AWS, with distributed architecture
- Redesigned high data intensive application on AWS to process **10M+ transactions/day** with 99.9% uptime
- Built Kafka queues handling **1M+ messages/hour** for near real-time data-streaming in Apple Supply-Chain ecosystem
- Migrated on-prem data-warehouses to AWS, reducing storage/operations costs by **50%**
- Transformed monolith to microservices, improving scalability by **300%**

### Qualcomm
**Senior ML, Distributed System Engineer**
Nov 2017 - May 2020

*Machine Learning • NLP • Big-Data • Spark • Python • HIVE • MapR DB • Kafka • TensorFlow • Keras • Snowflake*

- Developed ML models for chipset forecasting with **92% accuracy** using Algorithms like XGBoost, LSTM, NuralNetwork etc.
- Built GAN-based models, improving image quality by **35%** captured by Camera powered by Snapdragon chipset
- Optimized CPU/RAM usage utilization by **25%** using ML algorithms, running on Snapdragon chipsets
- Built Big-Data pipelines processing **2TB+ daily** in Hadoop ecosystem using Spark / MapR DB
- Won Innovation Maestro, Super-Qualstar, and multiple Qualstars; HaQkathon Winner, presented prototype to CxO leadership

### IBM
**Advisory Analyst, Azure Cloud SME**
Dec 2016 - Nov 2017

*Azure Cloud • Azure Data Factory • Azure Service Bus • WCF • MongoDB • C# • Java*

- Led **6-member team**, Azure migration for DB and Application completed weeks early from deadline
- Migrated **500GB+ data** with 99.9% integrity/accuracy, using Azure Data Factory, Service Bus, WCF, MongoDB, C#

### PwC
**Senior Developer / Consultant**
Oct 2014 - Dec 2016

*Data Warehouse • SQL-Server / Oracle • SSIS • ETL • C# • ASP.NET • JavaScript • MongoDB • Python • jQuery • Bootstrap • CSS*

- Built predictive search from **billion+ rows** in 2-5 seconds [Tuned DB highly; Used Python, Async jQuery, Bootstrap]
- Performance tuned SSIS to load **50M rows** within SLA
- Won STAR Performer & multiple client appreciation awards

### Cognizant
**Application Developer**
Apr 2012 - Oct 2014

*SQL Server • SSIS • C# • ADO.NET • JavaScript • Angular • Java*

- Managed **24x7** production support for MetLife bulk data processing, and application support
- Automated processes reducing manual effort by **60%**

## KEY METRICS 📊

| 13+ | 12+ | 70% | 50M+ |
|---|---|---|---|
| Years Exp | Members Led | Latency ↓ | Records / Day |

## CORE SKILLS ⚡

### Database, Big-Data & Analytics 🗄
DB Internals • DB Tuning/Optimisations • Data Streaming • MapR • Spark • HIVE • Kafka • Snowflake • Delta Lake • Flink • SQL • NoSQL • MongoDB • Predictive Analytics

### ML & AI 🧁
TensorFlow • Torch • Scikit-Learn • NLP • LLM • GenAI • Langchain • Neural Networks • GAN • LSTM • Agentforce • Supervised/Unsupervised Learning • Reinforcement Learning

### Cloud Platforms ☁
Apple Cloud - Cassandra • AWS • AWS - EC2 • AWS - EMR • AWS - EKS • AWS - S3 • AWS - Lambda • Azure • Azure - Data Factory • Docker • Azure - Service Bus • Kubernetes

### Programming 🧑‍💻
Python • JavaScript • Rust • Go • C# • Java • Backend • API

## EDUCATION 🎓

**M. Tech** in **Data Science & Engineering**
BITS - Pilani, Hyderabad, India
**With distinction**

**B. Tech** in **Computer Science & Engineering**
WBUT, Kolkata, India
**With distinction**

**Microsoft Certified Professional**
SQL Server (70-463)
✓ Certified

## AWARDS & RECOGNITIONS 🏅

**Salesforce Hackathon Winner** 🏆
Hackathon Winner & Best CoP Team in AI/ML

**Apple Recognition** 🏆
Key Contribution in Supply-Chain Project Go-live

**Qualcomm Innovation Maestro** 🏆
Qualcomm OneIT Innovation Maestro Winner

**Qualcomm HaQkathon Winner** 🏆
HaQkathon Winner, and Prototype Presentation to CxO

**Qualcomm Super-Qualstar** 🏆
Winner of Super-Qualstar and multiple Qualstars

**Qualcomm Top 3** 🏆
Stood in Top 3 in Worldwide ML Contest

**PwC STAR** 🏆
Outstanding Performance, & Key Contribution in Project Success

## LEADERSHIP 👥

- **Mentor:** 50+ professionals across Apple, Qualcomm, IBM, PwC
- **Interviewer:** Core technical panel for lateral hiring
- **Trainer:** Campus graduates on Analytics & Data Engineering
- **Team Builder:** Hired & scaled teams across organizations