

PRINCE SHANKUSHAL

Engineering Manager & Senior Solution Architect | AWS Certified Solutions Architect

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PROFESSIONAL SUMMARY

Engineering Manager and Senior Solution Architect with 11+ years of experience leading enterprise architecture, cloud modernization and engineering delivery for fraud and risk decisioning platforms at Western Union. Designs scalable, resilient and cost-efficient AWS solutions (EKS, ECS, API Gateway), modernizes legacy platforms into microservices and event-driven Kafka systems, and uses DevOps automation and AI / RAG / LLM-powered tools to accelerate engineering productivity. Leads a cross-functional 10-member team; delivered the migration of 10,000+ rules from FICO Blaze to Sparkling Logic in 3 months with zero production defects. Focused on technical excellence, operational reliability and measurable outcomes.

KEY ACHIEVEMENTS

- **Migrated 10,000+ fraud and risk rules from FICO Blaze Advisor to Sparkling Logic in a record 3 months** with full decision parity, zero production defects and no customer-facing downtime, using AI (Claude Skills)-driven rule conversion, simulation, ramp-up and rollback.
- **Reduced Sev-1 production incidents from ~70 per month to zero** by implementing the CQRS pattern; decisioning system handles 1M+ transactions.
- **Built a production-traffic simulation platform** that replays real traffic without breaking GDPR or customer data privacy, so fraud strategies are tested before go-live without risking conversion rates.

TECHNICAL SKILLS

Languages & Frameworks: C#, Microsoft .NET, .NET Core, ASP.NET Core, ASP.NET, MVC, Entity Framework, Java, Spring Boot, Spring Batch, Python, NodeJS, Angular, React, Windows Services, Entity Framework, Entity Framework Core

AI & Automation: LLM, Retrieval-Augmented Generation (RAG), Claude Skills, Snowflake Cowork AI (Claude 3.5 Sonnet), Github Copilot, Context Engineering

Architecture & Design (SSAD Toolkits): Microservices, Event-Driven Architecture, RESTful Services, Web APIs, SOAP, WCF, ASMX, CQRS, Domain-Driven Analysis, Design Patterns, Reference Architecture, Building Blocks, Custom Frameworks, High Availability, Cross-Region Failover, Dependency Injection, Multithreading (TPL), Memory Management, Change Management, Migration Planning

AWS Cloud & Containers: EC2, ECS (Fargate), EKS, Route53, API Gateway, ALB, S3, CloudWatch, MSK, Lambda, CloudFormation, Docker, Kubernetes Container Orchestration

Messaging & Streaming: Apache Kafka, Kafka Streams, AWS Managed Service Kafka (MSK), MSMQ

Databases: MS SQL Server, Oracle, Couchbase (NoSQL), Neo4j, Redis, Snowflake, MongoDB

BRMS: FICO Blaze Advisor, Sparkling Logic, Drools

CI/CD & DevOps: Jenkins, Spinnaker, Ansible, GitLab, GitLab CLI, TFS, Azure DevOps, IIS, OpenShift, SonarQube, CheckMarx, Xray, NUnit, Maven, NuGet, MSBuild, MSI, WiX Toolset, Docker Images, Spring Cloud Config, S3 Remote Config

Security, Identity & Monitoring: Ping, Okta, OpenID Connect, OAuth2, CyberArk, Gemalto, ALE KeySecure, PCI, PII, GDPR; Splunk, Dynatrace, Grafana, ELK, Kibana

Methodologies, Testing & Tools: Agile, Scrum, Capacity Planning, Delivery Management, Test Driven Development, XUnit, TypeMock, Moq, Karate, SoapUI, Postman, UML, JIRA, Confluence, Lucid Chart

PROFESSIONAL EXPERIENCE

Engineering Manager & Senior Solution Architect | Western Union India Services Pvt. Ltd., Pune, India **May 2026 – Present**

- **Led BRMS modernization**, migrating 10,000+ business and engineering rules from FICO Blaze to Sparkling Logic in a record 3-month window; designed the AWS infrastructure for Sparkling Logic on Amazon EKS (Kubernetes) with capacity planning, network deployment architecture, multi-region deployment, auto-scaling and auto-failover.
- **Lead and mentor a 10-member engineering team** across projects (technical direction, solution design, TDD, code reviews, L2 coordination for production deployment, troubleshooting and permanent fixes); own scrum and delivery management: backlog grooming, daily huddles, velocity tracking, capacity planning, RFPs, product evaluations, onboarding and appraisals.
- **Define architecture direction:** join strategic business discussions, analyze current systems and define end-state designs aligned with Enterprise Architecture; create the Reference Architecture Model and reusable plug-and-play building blocks; run architecture reviews and UML design artifacts documenting current and end-state blueprints; review solutions with Infosec for security and GDPR.
- **Architected AI-powered decisioning analysis** using .NET, Python and Retrieval-Augmented Generation (RAG) for rule analysis, decision forecasting and production-behavior visibility; built a Rule Evaluator model with Snowflake Cowork AI (Claude 3.5 Sonnet) to analyze discrepancies and validate the migration between the two engines.
- **Delivered enterprise integrations:** third-party vendor integrations with Apache Camel and Spring Boot, Couchbase-backed services, and loosely coupled rule-engine integration using dependency injection in .NET; drove Ping identity integration and Dynatrace instrumentation.
- **Deliver digital risk decision solutions end to end**, including 15+ major production releases in the year with zero production defects while maintaining release quality and operational stability; evaluate new technologies and build proofs of concept (Kafka data streaming, entity-based microservices); optimize legacy system performance with minimal effort and substantial results; plan service development for the Risk ecosystem.

Solution Architect | Western Union India Services Pvt. Ltd., Pune, India

May 2023 – Apr 2026

- **Designed a containerized, auto-scalable Kafka consumer framework** (NotifyMe) using the Observer design pattern, enabling reusable event-driven processing across multiple business use cases.
- **Led the migration of .NET decisioning orchestrators, microservices and Kafka consumers** from .NET Framework to modern .NET, enabling containerized deployments on AWS ECS and reducing dependency on Windows servers and IIS.
- **Architected a secure API access framework** for Risk Decisioning orchestration APIs, integrating Ping/Okta authentication and authorization with AWS API Gateway for access control, rate limiting and throttling.
- **Established CI/CD standards, branching strategies and governance dashboards** (Jenkins, Spinnaker, GitLab CLI) for consistent, transparent deployments; externalized configuration for .NET Core apps with a custom Spring Cloud Config service.
- **Implemented a custom cross-region auto-failover mechanism** for .NET services with dynamic health-check monitoring, switching traffic or services to an alternate region during component or regional outages.

- **Optimized orchestrator processing** with .NET Task Parallel Library (TPL) for concurrent rule execution and result aggregation, and a custom dependency injection container for modular, decoupled rule-engine integration.
- **Diagnosed critical .NET production performance issues** (long GC pauses, Large Object Heap pressure, thread starvation, CPU suspensions) and optimized memory usage with recyclable streams.
- **Isolated the memory-leaking FICO Blaze component** into a dedicated WCF service (ERS) to stabilize the orchestrator; automated IIS application pool recycling and warm-up across production servers to mitigate memory leaks and minimize downtime.
- **Developed a Kafka-based asynchronous computation framework** for age and velocity variables.

- **Engineered a reusable authentication handler framework** for external REST API integrations within the .NET orchestrator, enabling configuration-driven authentication.
- **Earned the Rising Star Award** for a .NET migration utility that automated moving SOAP UI test cases to the Karate framework, reducing manual effort and saving hundreds in licensing costs.
- **Modernized the legacy decisioning system** by migrating .NET ASMX services to the Mustang ASP.NET Web API decisioning platform with a dynamic data model for reusability and maintainability.
- **Contributed to cloud modernization**, identifying on-premises .NET and Java/Scala applications on IIS and OpenShift to migrate to AWS (EKS, EC2, ECS).

- **SILICA (team of 20)**: banking-domain wealth management and shareholder administration platform for Africa, Europe, the Middle East and Asia (material share of the South African investment administration market), managing huge volumes of data accurately and precisely for investor and intermediary relationships.
- **Reimagined and rebuilt the legacy desktop mutual funds application** as a multitenant web application with .NET background services connecting to the existing IDL C++ servers that hold the core logic; built the web layer on a generic, configuration-driven AlpacaJS framework with OpenAPI integration for OAuth-based logins.
- **Migrated the entire project to Azure DevOps independently**, creating CI/CD pipelines and managing repositories.
- **Worked on .NET Core, WCF, MVC, Web APIs, C++, VB, Oracle, Angular, HTML5, CSS3, jQuery and AlpacaJS**; prepared project plans and technical design documents from functional requirements; worked directly with onsite clients in requirement walkthroughs and daily/weekly status calls in an Agile process.

KEY PROJECTS & SOLUTIONS (WESTERN UNION)

- **BRMS Rule Engine Migration, FICO Blaze to Sparkling Logic (Technical Lead)**: fraud and risk decision flows for Money Transfer and Customer Onboarding behind a .NET Core orchestrator (1M+ transactions); rule pattern topology enabling AI-assisted rule writing and migration; simulation and ramp-up replayed live production transactions for parity checks before a phased cut-over, with no upstream or downstream impact.
- **Risk and Fraud Management Decisioning Orchestrator and RMP API (Architect)**: .NET decisioning orchestrator and Risk and Fraud Management Platform API for a digital money transfer system, on-premises and on AWS (capacity planning, deployment architecture); rebuilt RESTful services, WCF and legacy ASPX in ASP.NET Core and Spring Boot; highly available decision engine integrated with FICO Blaze Advisor; multi-region auto-failover with custom application and database health checks; centralized logging to Snowflake, Splunk, Dynatrace and Grafana; PCI and PII data protected with encryption at rest using ALE KeySecure.
- **External Vendor Integrations, Vendor Gateway and Vendor Orchestrator (Technical Lead)**: Vendor Gateway Interface and Vendor Orchestrator Message Adapter (Apache Camel, Spring Boot, Couchbase) for data enrichment and fraud/risk scoring; 15+ third-party vendors integrated through a configuration-driven framework.
- **Asynchronous Kafka Frameworks (Senior Associate)**: NotifyMe consumer framework for async business use cases; chargeback and reported-fraud notification batch processing (Spring Batch); Age and Velocity Variables Compute Framework with pre-aggregated variable calculation from Kafka into Couchbase, hosted on AWS Fargate ECS behind an ALB; orphan transaction cancellation and queue handling with Kafka Streams (.NET Core).
- **Entity Services and Neuron Entity Decision System, Monolith to Microservices (Senior Associate)**: domain-driven analysis of Hotlist, Negative Data and Customer Profile; migrated services from WCF to RESTful microservices (ASP.NET Core, Spring Boot) on Fargate ECS, EKS, API Gateway and Couchbase with distributed caching (Couchbase in-memory buckets, Redis); dockerized Data Services skeleton that creates a new Entity Service on demand, integrated with Blaze Advisor; MS SQL to NoSQL migration; OpenID Connect with Okta, CyberArk credential management, CloudFormation stacks for brown and green fields, CI/CD with Jenkins, Sonar, Xray and Ansible.
- **Metadata Services and APIs**: ASP.NET Core service on Couchbase storing message JPaths and XPaths as the enterprise single source of truth for standard data exchange; Dynatrace instrumentation; designed for high scalability and performance, on-premises and on AWS.
- **Cloud Migration and Data Solutions**: lift-and-shift assessment of Risk-domain applications from on-premises to AWS using Docker on Fargate ECS, EKS and API Gateway; OAuth2 via Lambda on API Gateway with Okta/Ping; Kafka and AWS MSK streaming to Hadoop and Snowflake for offline analytics and fraud monitoring; S3 as data source for the enterprise limit framework and fraud/risk limit management; XML ingestion from MS SQL OLTP to ODS and reporting servers; on-premises MS SQL to Couchbase migration.

EDUCATION, CERTIFICATIONS & AWARDS

Education: Bachelor of Engineering (B.E.) in Computer Science, RGPV Bhopal, 2011 – 2015 **Certification:** AWS Certified Solutions Architect, Amazon Web Services, 2024

Awards: 3 Quarterly Awards and Rising Star Award (Western Union); Client Appreciation and Young Star Award (Zensar)

Languages: English, Hindi