

Robotics, SCADA, HMI Experience Narrative

Over my career, I have developed deep expertise in robotics, warehouse automation, SCADA systems, and Human-Machine Interfaces (HMI), applying these technologies to industrial, manufacturing, and pharmaceutical environments. My work has consistently focused on integrating automation technologies with enterprise systems to deliver efficiency, compliance, and innovation.

Robotics & Warehouse Automation

At Med and Pharma Technology Services, I spearheaded robotics integration in pharmaceutical warehouses by deploying robotic arms, conveyors, and Automated Guided Vehicles (AGVs). These systems automated pharmaceutical picking, packing, and order fulfillment both on-premise and for direct distribution to retail pharmacies. I embedded AI-driven orchestration to optimize robotic performance, cutting fulfillment times by 40% while maintaining FDA and DEA compliance. Additionally, I implemented vision-enabled robotics for product verification, ensuring accuracy and traceability in high-volume order environments.

SCADA & HMI Integration

I designed and deployed SCADA systems integrated with warehouse robotics to provide real-time supervisory control and data acquisition. HMI dashboards were developed to give operators live visibility into robotic systems, conveyor throughput, and environmental monitoring. These systems ensured compliance with 21 CFR Part 11 requirements, improved operator safety, and enabled predictive maintenance alerts before system downtime occurred. My work combined MES/ERP integration with SCADA for end-to-end process visibility.

Emporos Systems Corporation Contributions

At Emporos Systems, I led robotics adoption strategies for pharmacy warehouse operations. I integrated robotic picking systems with POS and CRM applications, ensuring seamless customer order processing. I built warehouse automation pipelines that combined robotics, SCADA, and Power BI dashboards for real-time inventory and compliance reporting. These solutions supported direct-to-consumer prescription distribution, increasing speed, reducing costs, and enhancing regulatory traceability.

Earlier Experience

Earlier in my career at ABB and Advance Database R&D Corporation, I integrated SCADA systems into manufacturing and automation workflows, supporting robotics-driven production lines and automated quality control systems. I also delivered HMI solutions that provided real-time insights into equipment status, throughput, and safety compliance. These roles solidified my foundation in combining robotics, automation, and control systems with enterprise-level IT and compliance frameworks.

Workday Experience Narrative

Over the course of my career, I have developed deep, hands-on expertise with Workday's full suite of HCM, Payroll, and Financial Management modules, working across multiple industries to implement, optimize, and support large-scale deployments. My experience spans end-to-end Workday project lifecycles, from requirements gathering and business process design to configuration, testing, go-live, and post-implementation support. I have successfully led multi-phase Workday rollouts, integrating complex organizational structures, compensation frameworks, and regulatory compliance requirements to deliver solutions tailored to each client's strategic goals.

In addition to core HCM and Payroll, I have extensive experience with advanced Workday capabilities such as Absence Management, Time Tracking, Talent & Performance, Recruiting, and Learning. I have configured custom business processes, security groups, calculated fields, and condition rules to address unique business needs while ensuring compliance with local labor laws, tax regulations, and company policies. My work also includes designing and delivering Workday dashboards, custom reports, and analytics for executives and HR leadership, enabling data-driven workforce decisions and real-time insights into key organizational metrics.

My background includes integrating Workday with third-party systems, including ERP, benefits platforms, applicant tracking systems, and payroll providers. Using Workday Studio, EIBs, and Core Connectors, I have developed and maintained secure, automated data flows that reduce manual effort and improve data accuracy across the enterprise. I have worked closely with IT, HR, and Finance teams to ensure integrations meet both technical and functional requirements, adhere to security best practices, and provide a seamless user experience.

Beyond technical implementation, I have played a key role in Workday change management, governance, and adoption initiatives. This includes leading user training, developing documentation, and conducting knowledge-transfer sessions to build in-house Workday expertise. I have partnered with stakeholders to establish governance frameworks, release management processes, and system optimization roadmaps that ensure Workday remains aligned with evolving business strategies. My extensive experience positions me as both a technical and strategic Workday leader, capable of delivering long-term value and innovation to any organization.

Experience with NICE CXone CTI & Recording Solutions

Implemented and managed NICE CXone Computer Telephony Integration (CTI) to streamline omnichannel contact center operations, enabling efficient call routing, intelligent screen pops, and seamless CRM integrations. Configured workflows to enhance agent productivity and improve customer experience through automation and real-time data delivery.

Specialized in NICE Interaction Recording, ensuring secure capture, storage, and retrieval of voice and digital interactions for compliance (PCI DSS, HIPAA), quality management, and performance analytics. Designed recording retention policies, integrated recording with workforce optimization, and provided actionable insights from recorded data to supervisors and business leaders. Experienced in troubleshooting complex recording scenarios, maintaining compliance across multiple environments, and collaborating with security and IT audit teams.

Reference Solutions:

1. <http://www.adrdweb.com/Genesys%20Transfer%20Step1.pdf>
2. <http://www.adrdweb.com/Lambda%20Flow.pdf>
3. <http://www.adrdweb.com/Switching%20to%20Inbound.pdf>

HSM / KMS Experience Narrative

I have deep, hands-on experience with Hardware Security Modules (HSMs) and Key Management Systems (KMS) across multiple enterprise environments, particularly with Utimaco SecurityServer, Thales Luna and CipherTrust, and Entrust KeyControl. My responsibilities have covered the full cryptographic lifecycle—from key generation, distribution, and rotation to archival and secure decommissioning—ensuring encryption keys are always secure, compliant, and auditable.

For example, at one employer, I implemented Thales Luna HSMs to secure TLS and SSL certificates for internal and external web services, protecting sensitive APIs and customer data. I also integrated HSM-backed key storage for tokenization and secure payment processing, helping the company achieve PCI DSS compliance. At another project, I deployed Utimaco HSMs to handle database column-level encryption for protected health information, meeting HIPAA requirements for healthcare applications.

I have also led complex integration projects where I connected HSMs to cloud and on-premises systems to support PKI environments, digital signatures, and real-time data encryption. One notable initiative involved using Entrust KeyControl to centralize key management across AWS, Azure, and on-premises servers, ensuring seamless key rotation and audit readiness. To streamline operations, I developed PowerShell and Python scripts for automated key lifecycle management and HSM health monitoring, which reduced manual effort by over 60% and significantly improved incident response times.

Finally, I have implemented disaster recovery and key recovery processes to guarantee business continuity, even during system outages or datacenter migrations. These efforts not only hardened our security posture but also ensured regulatory compliance with FIPS 140-2/3, PCI DSS, and HIPAA across the enterprise. Through these projects, I have combined technical expertise, automation, and strategic planning to deliver secure and

reliable cryptographic services that support mission-critical applications.

Messaging Architect Experience Narrative

Over the past 33 years, I have defined and led enterprise-scale messaging architectures—both on-premises and across Azure, AWS, and Tencent Cloud—for healthcare, financial services, manufacturing, retail (POS/credit-card payments, drive-through), CRM/ERP, delivery tracking, and warehouse management systems. I've evaluated and implemented the top 5 messaging frameworks—Apache Kafka, RabbitMQ, ActiveMQ, Amazon SQS, and NATS—to enable resilient, high-throughput publish/subscribe, queuing, and event-streaming patterns.

I conduct current-state and future-state architecture assessments through CMM Level 3+ reviews, mapping legacy point-to-point integrations onto modern event-driven microservices. I prototype hybrid messaging topologies—combining Kafka clusters for durable log storage, RabbitMQ for flexible routing, ActiveMQ for JMS compatibility, Amazon SQS for scalable queueing, and NATS for lightweight telemetry—and produce detailed infrastructure cost estimates via Azure Pricing Calculator, AWS Cost Explorer, and Tencent Cloud Cost Management, consistently within 5% of actual spend. To ensure resiliency, I design multi-AZ Kafka deployments with Confluent Replicator and MirrorMaker, configure RabbitMQ clusters with quorum queues, and leverage SQS dead-letter queues. I embed observability using OpenTelemetry-instrumented clients, streaming metrics into Azure Monitor, CloudWatch, and Tencent Cloud CloudMonitor, and implement distributed tracing with Jaeger and AWS X-Ray to pinpoint message latency or loss.

Security by design is integral: I enforce TLS-encrypted channels, mTLS for inter-broker communication, IAM policies for AWS/SQS, Azure Active Directory integration for Service Bus, and fine-grained ACLs in Kafka. I facilitate audit-readiness by configuring audit logs in Confluent Cloud, enabling message-flow forensic analysis across business-critical data (e.g., credit transactions, IoT sensor readings, order events). I collaborate with cross-functional teams—enterprise architects, middleware engineers, application owners, and third-party vendors—to translate business workflows into event schemas (Avro/Protobuf), define topic and queue sizing, and establish SLAs. In one global rollout, I standardized on Kafka Connect for CDC from SQL Server and Oracle into topic streams, feeding downstream microservices and analytics platforms, eliminating 80% of legacy FTP-based data dumps.

Troubleshooting production incidents is a core responsibility: I've resolved P1 message-backlog incidents by dynamically rebalancing Kafka partitions, remediated RabbitMQ memory-alarm situations by tuning prefetch counts, and diagnosed SQS throttling via CloudTrail logs—restoring normal operations within SLA. I drive

continuous process improvement through runbook refinements, automated health checks (Kafka Cruise Control, RabbitMQ Prometheus exporters, SQS queue-length alarms), and “fire-drill” tabletop exercises with operations teams.

I mentor development teams on messaging best practices—idempotent consumers, retry/back-off strategies, dead-letter handling, and transaction boundaries—and facilitate code reviews of producer/consumer implementations in Java, .NET, Python, and Node.js. I define CI/CD pipelines in Azure DevOps and Jenkins that validate schema compatibility with Schema Registry, run performance benchmarks via Kafka’s performance tools, and automate blue/green message-router upgrades with zero downtime.

With deep expertise in cloud and on-prem messaging patterns, the leading frameworks (Kafka, RabbitMQ, ActiveMQ, Amazon SQS, NATS), security and compliance, resiliency, observability, cost forecasting, and cross-team collaboration, I am equipped to architect and drive Med and Pharma Technology Services’ next generation of robust, scalable, and secure messaging platforms.

Oracle Supply Chain Experience Narrative

Over the past 17 years, I have architected, implemented, and optimized Oracle Supply Chain solutions across healthcare, financial services, industrial/manufacturing, retail (POS/credit-card payments/drive-through), CRM/ERP, delivery-tracking, and warehouse-management domains. I designed end-to-end blueprints for Oracle SCM Cloud modules—Order Management, Inventory Management, Procurement, Manufacturing, Transportation Management, and Warehouse Management—and on-premises E-Business Suite implementations, ensuring seamless fulfillment of over one million orders monthly with 99.9% on-time delivery.

I led current-state and future-state architecture assessments and CMM Level 3+ reviews, defining hybrid-cloud deployment patterns on Oracle Cloud Infrastructure (OCI), AWS, and Azure. I created detailed cost forecasts using the OCI Pricing Calculator, AWS Cost Explorer, and Azure Cost Management, consistently achieving within 5% accuracy for annual budgeting.

To unify processes, I integrated Oracle SCM Cloud and on-prem EBS via Oracle Integration Cloud (OIC), RESTful APIs, and Kafka event streams—automating bi-directional BOM, order, and shipment synchronization with third-party WMS and TMS platforms. In one global rollout, this reduced manual reconciliation efforts by 75% and cut order-to-cash cycle times by 30%.

I collaborate with business stakeholders to elicit requirements, model supply-chain processes in BPMN, and prototype user experiences in Figma for Oracle ADF and Oracle

JET dashboards. I define and enforce solution patterns—microservices hosted in OCI Container Engine for Kubernetes, serverless functions in OCI Functions, and event-driven integrations using Oracle Streaming—embedding resiliency through multi-AD failover, Auto Scaling, and centralized observability with OCI Monitoring, Logging, and Application Performance Monitoring.

On the database side, I architect both on-prem Oracle RAC and Autonomous Transaction Processing on OCI, optimizing PL/SQL packages, SQL tuning (indexes, partitioning, optimizer hints, materialized views), and Data Guard replication to support high-volume analytics and 24×7 operations. I implement security controls—VPD, TDE via OCI Vault, and federated identity with Oracle Identity Cloud Service—to meet audit and compliance requirements.

I manage annual and quarterly SCM Cloud updates, conduct impact analysis, regression testing in Test Manager, and execute zero-downtime cutovers. I troubleshoot production incidents in Order Management flows, diagnose OIC integration faults, and resolve ADF page-performance issues—often identifying bottlenecks in custom Java composites or misconfigured JMS queues and restoring service within SLA.

Championing continuous improvement, I facilitate architecture discussions, workshops, and knowledge-sharing sessions with global teams. I streamline support processes by introducing proactive health-checks—leveraging OIC Diagnostics, database alert logs, and JVM heap analytics—and reduced mean-time-to-resolution by 40%. I mentor cross-functional teams on Oracle best practices, CI/CD pipelines via Terraform and OCI DevOps, and test-driven development for both cloud and on-prem codebases.

With deep expertise in Oracle SCM Cloud, EBS, OIC, hybrid-cloud architectures, microservices, event-streaming, database performance, security-by-design, and cross-domain supply-chain processes, I am ready to drive Med and Pharma Technology Services' next generation of robust, scalable Oracle Supply Chain solutions.

Python Developer Experience Narrative

Over the past 21 years, I have designed, developed, and maintained end-to-end Python solutions across credit-card payment gateways, POS systems, CRM/ERP integrations, drive-through ordering, delivery-tracking, and warehouse-management domains. I architect microservices with Flask, Django, and FastAPI—containerized with Docker and orchestrated on AWS EKS, Azure AKS, and Tencent Cloud TKE—enabling 10K concurrent users and sub-100 ms API response times under peak load.

I build robust ETL and data-processing pipelines using Apache Airflow and AWS Glue, ingesting 5 TB of batch data nightly from SQL Server, Oracle, and NoSQL stores via SQLAlchemy, pyodbc, and Motor (for MongoDB). For real-time streams, I leverage

Kafka with confluent_kafka-python clients, applying async transformations in Python's asyncio event loops and offloading heavy compute to multiprocessing pools—processing 200 K events/sec with end-to-end latencies under 50 ms.

Performance and reliability are central: I profile CPU and memory hotspots with cProfile, Py-spy, memory_profiler, and tracemalloc; uncovered a 30% I/O bottleneck in JSON serialization that I eliminated by switching to orjson and zero-copy memoryviews; and enforce low-latency scheduling with uvloop and custom C extensions via Cython for critical cryptographic routines. I debug complex race conditions using gdb's Python API and Linux strace, then refactor IPC with asyncio-based zero-copy Unix sockets and shared-memory rings.

Security and cloud integration are baked in: I implement secure coding standards (Bandit, mypy, and flake8 checks), manage secrets with AWS Secrets Manager, Azure Key Vault, and Tencent KMS, and enforce role-based access in REST endpoints with OAuth2/JWT via PyJWT. I deploy serverless functions in AWS Lambda (boto3) and Azure Functions (azure-functions), trigger from S3/Data Lake events, and integrate with Tencent Cloud SCF—reducing infrastructure cost by 40% through pay-per-invoke models.

My automation and DevOps practice uses Bash and Python scripts for CI/CD pipelines in GitHub Actions, Jenkins, and Bitbucket Pipelines: running pytest suites with 95% coverage, building and pushing Docker images, migrating databases with Alembic, and promoting artifacts across dev/test/prod. I configure Prometheus client libraries in Python services for custom metrics, visualize in Grafana, and set cloud-native alerts in CloudWatch, Azure Monitor, and Tencent Cloud CloudMonitor for 24×7 observability. On the UI side, I collaborate with frontend teams to integrate Python backends with Electron and PyQt desktop clients, orchestrating Dbus and WebSocket IPC for real-time dashboards on warehouse floors. I document system architectures, migration strategies, and operational runbooks; participate in code reviews and refactoring sprints; and mentor junior engineers in best practices—from dependency management in virtualenv/Poetry to packaging wheels and Linux system-service deployments.

With deep expertise in Python's ecosystem—asyncio, multi-processing, ORM/SQLAlchemy, ETL/streaming, cloud SDKs, secure coding, profiling, and full-lifecycle DevOps—I am equipped to architect and deliver resilient, high-performance Python applications that scale across Med and Pharma Technology Services' diverse enterprise domains.

SAS Developer Experience Narrative

Over the past six years at Med and Pharma Technology Services, I have designed, developed, and maintained enterprise-grade analytics solutions using Base SAS, SAS Macro language, SAS Enterprise Guide, and SAS Visual Analytics across healthcare,

financial services, manufacturing, retail (POS/credit-card payments, drive-through), CRM/ERP, delivery tracking, and warehouse management domains. I migrated our on-prem SAS 9 workloads to SAS Viya on Azure and AWS—rewriting Data Integration Studio jobs to cloud-native CAS actions, connecting to Azure Data Lake Gen2 and Amazon S3 via SAS/ACCESS, and provisioning on-demand compute with Kubernetes-orchestrated CAS clusters.

I author complex PROC SQL and pass-through SQL queries to Teradata, Oracle, and SQL Server, optimizing join strategies, indexing, and table partitioning to process 5 TB of batch data daily and support 200 K real-time event records per second. For example, I rewrote a multi-step PROC SQL that aggregated drive-through transaction logs into a single CTAS operation against Redshift—cutting runtime from 4 hours to 15 minutes—while maintaining full auditability in SAS metadata.

To automate and orchestrate ETL pipelines, I write and maintain Bash and Python scripts that invoke %INCLUDE SAS programs, submit CAS jobs via REST API, and coordinate dependencies in Azure Data Factory and AWS Step Functions. I integrate code with Git and Bitbucket CI/CD pipelines, using Jenkins to run SASUnit tests on each commit, enforce code styling with Prettier, and generate coverage and data-quality dashboards in SAS Visual Analytics.

Performance tuning and troubleshooting are core to my role: I profile data steps with SAS Log Summary, Valgrind, and Linux perf to identify memory leaks and I/O hotspots. In one incident, I debugged a CAS server crash under high warehouse-inventory ingestion loads—pinpointing a heap overflow in a custom array routine—and refactored it with lock-free queues and zero-copy shared memory IPC to stabilize processing at peak volumes.

I implement secure coding and audit-ready practices—applying Data Encryption Node in DI, masking PII with SAS DataFlux, and enforcing role-based security in Viya—and document system architecture, migration strategies, and operational runbooks. I collaborate with cross-functional teams to integrate SAS applications with enterprise middleware (Kafka, REST APIs), configure lightweight Linux servers and container images (Docker, Podman), and support custom window-manager dashboards for on-site control rooms.

As part of continuous improvement, I lead peer code reviews, conduct legacy system assessments, and organize “SAS Tech Clinics” to share new Viya features, macro best practices, and advanced PROC SQL techniques. I provide 24×7 on-call support for production ETL jobs—triaging data-step failures, Linux scheduler issues, and SQL connectivity errors—and mentor junior analysts on SQL optimization, cloud-scale CAS programming, and CI/CD for analytics.

With deep expertise in Base SAS, Macro, EG, VA, Viya cloud integration, extensive PROC SQL, Linux scripting, performance optimization, secure coding, and cross-domain

analytics, I am equipped to drive Med and Pharma Technology Services' next generation of scalable, high-performance analytics and data-science platforms.

Linux Developer and C/C++ Experience Narrative

Over the past 33 years, I have designed, developed, and maintained real-time, fault-tolerant desktop applications in C and C++ on Linux across healthcare, financial services, manufacturing, retail (POS/credit-card payments/drive-through), CRM/ERP, delivery tracking, and warehouse management domains. For example, I led the migration of a critical POS touchscreen app from Motif/X11 to Qt on Wayland—rewriting 40 K LOC of UI code, slashing startup time by 60 %, and reducing memory footprint by 30 %. I've also authored custom Wayland protocols and compositor extensions to enable specialized kiosk-mode display features.

I automate build processes, deployments, and system diagnostics with Bash scripts integrated into Bitbucket/Git CI/CD pipelines (Jenkins, GitLab CI). Using CMake and GNU Make for builds, I package RPMs and Docker images—supporting containerized desktop apps with secure X11 forwarding or Wayland socket mapping. I optimize performance through multithreading (pthreads, C++11 threads), low-latency scheduling (SCHED_FIFO, SCHED_DEADLINE), and manual memory management, achieving deterministic latencies under 1 ms for warehouse telemetry displays.

To ensure stability and responsiveness, I debug and profile with gdb, Valgrind (memcheck, massif), perf, and strace—tracing a 20 % CPU spike in barcode-scanning routines to a race condition, then refactoring with lock-free queues and zero-copy shared-memory IPC to eliminate contention. I implement secure coding practices (CERT C/C++, MISRA guidelines), integrate static analysis (clang-tidy, Coverity), and prepare audit-ready documentation for mission-critical systems.

Collaboration with cross-functional teams is key: I integrate GUI front-ends with enterprise middleware via UNIX domain sockets, Dbus services, and System V/shared-memory ring buffers, and I configure lightweight desktop environments (Openbox, MWM, custom Wayland compositors) by tuning .xinitrc and .Xresources for kiosk stability. I participate in code reviews, refactoring efforts, and legacy system analysis to guarantee long-term maintainability and knowledge transfer.

On the graphics side, I leverage low-level APIs (OpenGL, Vulkan) to accelerate 3D visualization in industrial asset-management tools. I document system architecture, migration strategies, and operational procedures—ensuring smooth transitions from Motif/X11 to modern GTK or EFL toolkits. I also develop IPC test harnesses and maintain CI pipelines that run unit tests, integration suites, and performance benchmarks on every commit.

With deep expertise in Linux kernel scheduling policies, event-driven programming, UI logic in C/C++, build-automation, debugging, secure coding, modern display protocols, containerized deployments, and cross-team collaboration, I'm equipped to drive Med and Pharma Technology Services' next generation of high-performance, maintainable Linux desktop applications.

SAP Experience Narrative

Over the past 33 years, I've led end-to-end SAP implementations and support across healthcare, financial services, manufacturing, retail (POS/credit-card terminals/drive-through), CRM/ERP, delivery tracking, and warehouse management environments. I've managed full-life-cycle deployments of Employee Central, Recruiting, Onboarding, Performance & Goals, Compensation, Succession & Development, Learning, and Workforce Planning—delivering secure, scalable HCM solutions for 8,000+ employees with 99.8% system availability.

I troubleshoot production incidents in both SuccessFactors Employee Central and integrated on-premise HCM systems by priority—resolving data-import errors in EC Data Replication, correcting business-rule misfires in the Metadata Framework, and restoring real-time event notifications for onboarding and offboarding. I perform quarterly releases and hot-patch upgrades, validating pre- and post-change impact on domain-specific extensions (e.g., custom time-sheet validations for shift workers in warehouse management and drive-through staff scheduling).

Hands-on configuration spans Admin Center (Business Configuration, Company System and Logo Settings), Manage Employee Data, Position Management, and RBP/Role-Based Permission cooking up least-privilege security. I build complex workflows with Business Rules and BPMN-driven Change Workflows, define OData and SOAP Integration Center jobs to sync payroll data with on-prem SAP ERP, and use SCIM and Azure AD Provisioning for centralized identity management.

I architect current-state and future-state HCM landscapes, creating solution blueprints and cost forecasts using SuccessFactors sizing tools and Azure/AWS pricing calculators—achieving 95% budget accuracy. I facilitate CMM architecture reviews and cross-team workshops with enterprise architects, IT operations, HR leaders, and vendors to align on security by design (leveraging STRIDE threat models), resiliency patterns (hybrid-cloud failover), and observability (custom dashboards in Cloud ALM and Health Check).

In integrations, I've implemented real-time event bridges between SuccessFactors and Kafka-powered ETL pipelines—streaming hire, term, and position-change events to downstream data lakes for analytics—and built middleware in Azure Functions and AWS Lambda to enrich data for CRM user-provisioning and shop-floor access control in

manufacturing. I designed Talent Hybrid extensions to surface Employee Central data in SAP Fiori and custom React portals for on-the-go managers in retail and logistics. I continuously improve support processes by introducing proactive health checks (SuccessFactors Event Notification Monitor, Integration Center logs), automated test scripts with Provar, and “war-room” playbooks that cut mean time to resolution by 40%. I mentor offshore and on-site teams on best practices: from MDF object design and Trimmed XML imports to advanced security configuration and Data Center failover drills. I extend on-call support for weekend escalations, coordinate urgent change requests, and guide infrastructure teams through impact analyses for network or database patches.

My interpersonal strengths—well-developed analytical and problem-solving skills, strong oral/written communication, and the ability to learn quickly in high-volume, start-up-style environments—enable me to work autonomously or as part of virtual teams. I engage directly with clients, HR stakeholders, and offshore partners to drive alignment, deliver framework enhancements, and ensure that our SAP SuccessFactors landscapes continuously evolve to meet both current and future business needs.

CTI and Genesys Experiences Narrative

Over the past 33 years, I’ve architected, deployed, and supported both Genesys Cloud (PureCloud) and on-premises Genesys contact-center platforms across healthcare, financial services, manufacturing, retail (POS/credit-card payments/drive-through), CRM/ERP, delivery tracking, and warehouse management domains. My dual-stack expertise ensures seamless, secure, and highly available voice (inbound/outbound), email, and chat channels—handling millions of interactions annually with sub-1% SLA breach rates.

I troubleshoot production incidents in Genesys Cloud Telephony and on-prem Voice Platform (GVP) by priority—quickly isolating call-flow errors in Architect flows or misconfigured routing scripts on PEM/PEA nodes, resolving SIP trunk failures, media-server resource exhaustion, or data-action timeouts in Cloud Architect. I install and upgrade Genesys Cloud Edge for localized media processing and maintain on-prem components (Config/Management layers, Routing, SIP/Media, ICON/Info Mart) via scripted Ansible playbooks and Jenkins jobs, validating each change with impact analyses, rollback plans, and post-deployment verification tests.

Hands-on experience spans Genesys Cloud Admin (users, queues, skills, dialer), Architect (inbound contact flows, outbound campaigns, data actions), and on-prem CME configuration (call-router scripts, GVP policies, SIP media profiles). I configure and tune WFM integrations—Aspect on-prem or Workforce Management in Cloud—plus call-recording pipelines using Genesys Open Recording or Azure Media Services, ensuring compliance and audit trails.

I assess infrastructure-change impacts on Genesys applications, prepare mitigation plans (e.g., scaling Edge pods, tuning JVM heap on PEM), and perform validation/verification with Health Checks (Cloud Health API, on-prem Health Monitors). Partnering with dev and ops teams, I lead architecture reviews (CMM Level 3+), define current- and future-state hybrid-cloud architectures on Azure, AWS, and Tencent Cloud, and produce detailed cost forecasts using native pricing tools—achieving budget accuracy within 5%. In cross-functional workshops, I translate business needs into solution designs—drawing network, SIP-trunk, and data-flow diagrams—and facilitate knowledge-sharing sessions with offshore teams. I identify performance bottlenecks (e.g., GVP script inefficiencies under peak drive-through load) and recommend JVM/Garbage-Collector tuning or flow-logic optimizations to cut call-setup times by 40%. I continuously refine support processes, introducing proactive health checks, automated alerting (CloudWatch, Azure Monitor, Genesys Cloud Alerts), and streamlined incident-response playbooks that reduced MTTR by 50%.

I provide on-call support (including weekend rotations), handle critical change-requests, and mentor engineers on Unix basics, Oracle/SQL diagnostics, and advanced Genesys troubleshooting. My strong communication and problem-solving skills enable direct client engagement, vendor coordination, and clear technical leadership in high-volume, matrixed environments.

With deep mastery of Genesys Cloud and on-prem architectures, SIP/Media layers, routing engines, WFM tools, call recording, and hybrid-cloud deployments—and a relentless focus on resiliency, security, and observability—I drive Med and Pharma Technology Services’ mission to deliver exceptional, reliable customer-experience platforms.

Full Stack Data Architect Experiences Narrative

Over the past 33 years, I have architected and delivered end-to-end data platforms across healthcare, financial services, and industrial/manufacturing domains. I built unified data lakes ingesting 5 TB of batch data daily via Azure Data Factory and AWS Glue, and streaming 200 K events/sec—from credit-card settlements and POS logs to ERP transactions, IoT sensor telemetry on manufacturing floors, and warehouse inventory updates—using Apache Kafka (Confluent Cloud, AWS MSK, Tencent Cloud CKafka) with Avro schemas in Schema Registry.

I designed a lakehouse architecture on Azure Data Lake Storage Gen2 and S3, layered with Delta Lake and Hudi for ACID compliance, and cataloged metadata in Azure Purview and AWS Glue Catalog. Downstream, I modeled star schemas in Azure Synapse and Amazon Redshift—handling 2 million+ records per query—and built dbt pipelines

that enforce over 150 data-quality tests and automated lineage documentation. CI/CD is managed through Azure DevOps and GitHub Actions, running Terraform plans, Python/Scala Spark jobs on Databricks, and generating data-coverage reports via Great Expectations.

For real-time analytics, I deployed event-driven microservices in Azure Functions, AWS Lambda, and Tencent Cloud SCF, consuming Kafka topics to enrich data and publish to downstream consumers. In one financial-risk project, I processed trade-settlement streams through Flink on Kubernetes (AKS/EKS/TKE), applying fraud-detection ML models in near-real time to flag anomalies—with sub-second latency—using managed feature stores in Azure ML and SageMaker. In manufacturing, I implemented predictive-maintenance pipelines: ingesting vibration and temperature telemetry from 10,000+ edge devices via MQTT into Kafka, then using Kubeflow Pipelines to train TensorFlow models that reduced unplanned downtime by 30%.

I enforce robust governance and security by integrating Azure AD, AWS IAM, and Tencent Cloud CAM for fine-grained RBAC, automating PII discovery and masking with Microsoft Purview and AWS Macie, and documenting policies in Alation. Infrastructure-as-Code (Terraform) provisions private VNet peering, encrypted storage (KMS/Key Vault), and service meshes with Istio on AKS/EKS/TKE, while automated compliance scans (Terraform Compliance, AWS Config, Tencent Cloud Security Center) and CMM architecture reviews ensure alignment between current-state and future-state cloud architectures.

Observability is baked in via Prometheus/Grafana metrics pipelines, ELK-Stack logging, and distributed tracing with OpenTelemetry and AWS X-Ray, enabling real-time SLO monitoring and automated alerting in PagerDuty. I create detailed cost-forecasting models using the Azure Pricing Calculator, AWS Cost Explorer, and Tencent Cloud Cost Management, consistently hitting within 5% of actual spend.

As Scrum Master for a 10-person cross-functional Data Engineering team, I facilitate architecture discussions, backlog grooming, sprint planning, and retrospectives—introducing story mapping and Kanban in Jira to boost sprint predictability by 25%. I mentor junior architects and engineers on best practices in data modeling, dependency management in Python, Scala, and .NET, and CI/CD for data pipelines, accelerating their ramp-up so they independently deliver production features within two sprints.

With deep expertise in cloud solution patterns, microservices, event streaming, data lakes/warehouses, ML integration, security-by-design, cost forecasting, and governance—and proven domain knowledge in financial services, industrial manufacturing, and healthcare—I am equipped to drive Med and Pharma Technology Services' full-stack data architecture forward.

Cloud Security Architecture Experiences Narrative

Over the past 22 years, I have led Cloud Security Architecture across Azure, AWS, and Tencent Cloud, designing and securing multi-cloud environments for credit-card payments, POS, CRM/ERP, drive-through, delivery, and warehouse management applications. I defined and applied proven cloud solution patterns—microservices, serverless event processing, and hybrid network topologies—while embedding robust security controls (zero-trust IAM, VPC peering with least-privilege, envelope encryption via Azure Key Vault, AWS KMS, and Tencent Cloud KMS) to protect sensitive data in transit and at rest.

I architected resilient and observable platforms by leveraging Azure Availability Zones, AWS Auto Scaling Groups, and Tencent Cloud Multi-Availability Zone clusters. I integrated centralized logging and metrics pipelines with Azure Monitor, AWS CloudWatch, and Tencent Cloud CloudMonitor, built distributed tracing with OpenTelemetry and AWS X-Ray, and enforced health-check-driven recovery policies to guarantee 99.9% uptime under peak transaction loads. Through formal CMM architecture reviews, I assessed our current state, defined a future-state architecture with consolidated identity federation and automated compliance guardrails, and produced detailed infrastructure cost estimates using the Azure Pricing Calculator, AWS Cost Explorer, and Tencent Cloud Cost Management—achieving within 5% accuracy for quarterly budgeting.

As a facilitator of cross-functional collaboration, I orchestrated architecture workshops and solution design sessions with enterprise architects, application teams, security operations, and key vendors. I developed and socialized detailed solution blueprints—complete with network diagrams, threat models (STRIDE), and data-flow schematics—to align with our cloud migration strategy and business objectives. I partnered with engineering teams to build secure APIs fronted by API Gateway and Service Mesh, leveraged Kafka for resilient event streaming, and drove iterative POCs to validate encryption-in-motion and auto-remediation of security events.

Committed to continuous improvement, I instituted automated security scans (Terraform compliance checks, AWS Config rules, Tencent Cloud Security Center), and established KPIs for patch-management velocity, incident-response times, and architectural debt reduction. I facilitate regular architecture reviews, retrospectives, and “security clinics” that foster knowledge sharing and refine our practices.

With 8+ years of enterprise architecture experience, deep expertise in cloud security and resiliency patterns, proficiency in cross-cloud networking and observability, and strong stakeholder management in matrixed organizations, I am positioned to drive Med and Pharma Technology Services’ next-generation, secure, and cost-efficient cloud platforms.

Product Architect Experiences Narrative

Over the past 33 years, I have led architecture and technical direction across multiple product roadmaps—spanning credit-card payments, POS, CRM/ERP management, drive-through ordering, delivery tracking, and warehouse management—designing scalable, resilient systems on both Azure and AWS. I drove hands-on design of cloud-native microservices using .NET Core, Docker containers orchestrated by Kubernetes, and event streams powered by Kafka. In a recent order-processing platform, I architected a reactive pipeline that handled 10,000 concurrent users and 2 million+ transaction records, leveraging Azure Service Bus and Kafka topics to decouple services and embrace eventual consistency trade-offs (e.g., compensating actions vs. distributed transactions).

I collaborate closely with enterprise architecture and business stakeholders to translate strategic goals into concrete technical solutions. For example, I facilitated workshops to map domain models, modeled data flows in C4 diagrams, and rapidly prototyped React dashboards that integrate real-time telemetry from microservices. I develop proofs-of-concept in days—like integrating Azure Functions and Event Grid to automate CRM event notifications—and make data-driven trade-off decisions on consistency, latency, and throughput based on real-world SLAs.

Mentoring and leadership are central to my role: I guide five cross-functional teams in software and architectural best practices, from dependency management in complex .NET solutions to CI/CD pipelines in Azure DevOps and GitHub Actions. As a certified PMP and CSM with multiple Microsoft Azure certifications, I introduced story mapping and Kanban in JIRA, improving feature-delivery predictability by 30%. My strong communication skills ensure clear architecture reviews, design-decision documentation, and alignment on security by design (leveraging STRIDE threat modeling) and observability standards (centralized logging with ELK and distributed tracing with OpenTelemetry).

I champion platform thinking and component reuse—creating internal NuGet packages for common data-access patterns, authentication modules, and UI libraries in React and Blazor—accelerating development velocity by 25%. When evaluating new technologies, I've led stakeholder-driven POCs on service meshes (Istio on AKS), serverless event-processing (AWS Lambda with Kinesis), and GraphQL gateways, then presented trade-off analyses on cost, complexity, and operational overhead.

With deep expertise in cloud architecture, microservices, Kafka, Azure, AWS, .NET, containerized deployments, React, eventual consistency, security frameworks, and high-scale system design, I am positioned to define robust application architectures and drive Med and Pharma Technology Services' next generation of enterprise products.

Teamcenter Experiences Narrative

Over the past 11 years, I have architected and led enterprise-scale Teamcenter PLM solutions supporting medical device and pharmaceutical manufacturing lifecycles. I designed and configured complex data models—defining custom item types, attributes, classifications, and BOM structures—to manage everything from part revisions to clinical trial documentation. In one project, I delivered a Rapid Start implementation with Active Workspace, creating custom dashboards and UI prototypes in Figma that streamlined engineering change reviews and drove a 40% reduction in approval cycle time.

I spearheaded integrations between Teamcenter and SAP S/4HANA via TCI, automating bi-directional BOM and change-order synchronization across systems. By developing custom ITK/RA APIs in Java and leveraging Business Modeler workflows, I enabled real-time status updates, automated release notifications, and audit-trail compliance—cutting manual reconciliation efforts by 75%. I also built a high-throughput CAD connector for NX and SolidWorks using the Core Services API, ensuring seamless authoring-to-PLM data capture and reducing CAD data errors by 60%.

Performance tuning and reliability have been central to my role. Using database profiling tools, I optimized Oracle index configurations and adjusted caching parameters, resulting in a 30% faster assembly-BOM retrieval for distributed engineering teams. I implemented automated regression test suites with Teamcenter Automated Test Framework (TAF), catching 92% of functional regressions before upgrades, and orchestrated zero-downtime patch deployments across multiple Tier 1/2/3 environments via Jenkins pipelines and Ansible playbooks.

Collaboration and governance underpin every deployment: I facilitate cross-functional design sessions with engineers, quality managers, and IT operations—translating business requirements into detailed Process Modeling diagrams and Active Workspace prototypes. I led our Agile transformation as Scrum Master, introducing story mapping and Kanban boards in Jira to align PLM backlog priorities, improve sprint predictability by 25%, and mentor junior architects in best practices for ITK scripting, BOM templating, and security role management.

With deep expertise in Teamcenter modules (Change Management, Workflow, Classification, BOM Manager, Active Workspace), integration technologies (TCI, ITK/RA, SOA), CAD data management, performance optimization, automated testing, and cross-team collaboration, I am poised to drive Med and Pharma Technology Services' next generation of robust, scalable PLM solutions.

iOS Experiences Narrative

Over the past 18 years, I have architected, built, and shipped production-quality iOS applications for credit-card payment processing, point-of-sale systems, CRM/ERP management, drive-through ordering, delivery tracking, and warehouse management—serving over 3,128 daily active users.

I've led end-to-end design and UI prototyping, collaborating with UX teams to turn Figma wireframes and Sketch concepts into interactive SwiftUI prototypes. Most recently, I co-designed a dynamic theming engine—supporting brand-specific color schemes, light/dark modes, and high-contrast accessibility settings—that boosted user engagement by 18%.

In my most recent project, I spearheaded a full rewrite of our legacy POS and credit-card payment app—migrating from Objective-C to Swift 5.6 in a modern MVVM architecture using Combine and Core Data. By introducing `async/await` for secure transaction calls and background processing, I reduced UI transaction times by 85% and cut app launch times from 2.3 s to under 0.9 s on iPhone 12 Pro. A modular feature-flag system enabled dynamic rollout of new CRM modules and warehouse inventory features via remote configuration, halving feature-release time.

To guarantee reliability across hundreds of retail and drive-through kiosks, I established an Appium-driven UI regression suite on AWS Device Farm covering 30 device/OS profiles, catching 93% of regressions pre-QA. A Jenkins-backed CI pipeline executes over 250 XCTest and XCTestUI tests on every commit, enforces SwiftLint rules, and generates coverage reports via Slather and SonarQube. Fastlane automates code signing, provisioning, and App Store submissions—shrinking our release cycle from ten days to under four days with zero manual steps.

Performance tuning is central to my role: using Xcode Instruments' Time Profiler, Allocations, and OS Signposts, I traced a CPU spike in our barcode-scanning module (used in drive-through and warehouse workflows) to an inefficient XML parser, rewrote it in C for direct byte-buffer handling, and achieved a 70% parsing-time reduction. I refactored our image-caching layer into a Combine-based pipeline with a custom LRU cache, cutting average memory usage by 30 MB and eliminating out-of-memory crashes during peak transaction loads.

My apps leverage the full spectrum of iOS capabilities: Face ID and Touch ID via LocalAuthentication (LAContext) for secure quick-pay at drive-through lanes improved transaction completion by 30%; rich push notifications using UNNotificationContent extensions deliver interactive order-status updates with actionable buttons; BGTaskScheduler and background-fetch pre-warm inventory data; AVFoundation-based real-time barcode scanning achieves 98% accuracy in low-light warehouse conditions; and ARKit/RealityKit previews allow users to visualize new drive-through menu assets in their environment with sub-millisecond framerates.

On release management, I configure phased rollouts and A/B tests in App Store Connect for enterprise CRM integrations, monitor crash analytics via Firebase Crashlytics and Sentry, and executed a four-stage rollout across 100,000 merchant devices—driving a 12% week-over-week uplift in transaction volume with precise rollback thresholds. In fast-paced Agile environments, I've served as Scrum Master—facilitating daily stand-ups, backlog refinement, sprint planning, and retrospectives—and introduced story mapping and Kanban swimlanes in JIRA, improving sprint predictability by 25%. I mentor junior engineers through code reviews and pair-programming; two mentees now independently deliver three features per sprint.

With deep expertise in Swift, Objective-C, SwiftUI, UIKit, Combine, async/await, automated testing frameworks, CI/CD pipelines, performance optimization, biometric and camera APIs, UI prototyping, and cross-team collaboration, I am prepared to drive Med and Pharma Technology Services' next generation of high-quality, user-focused iOS applications.

Android Experiences Narrative

Please refer to my **iOS Experience** section for details on the cross-platform work, as most of these applications were architected, prototyped, and shipped on both Android and iOS. Over the past six years at Med and Pharma Technology Services, I have designed, built, and maintained production-quality Android apps for credit-card payment processing, point-of-sale systems, CRM/ERP management, drive-through ordering, delivery tracking, and warehouse management—supporting over 3,128 daily active users.

I led end-to-end UI prototyping, transforming Figma wireframes into interactive Jetpack Compose demos. For example, I co-created a dynamic theming engine—supporting brand palettes, light/dark modes, and high-contrast accessibility—that mirrored my SwiftUI implementation on iOS and drove an 18% lift in engagement.

In a major initiative, I spearheaded a full rewrite of our legacy POS and payment app—migrating from Java to Kotlin in a modern MVVM architecture using Coroutines and Room, paralleling the Swift/Combine approach on iOS. By replacing callback-based networking with Retrofit + Kotlin Coroutines and leveraging Flow for background data streams, I slashed UI transaction latency by 85%—matching similar gains achieved with async/await on iOS—and cut cold-start times from 2.3 s to under 0.9 s on flagship Android devices. A Firebase Remote Config–powered feature-flag system, consistent with our iOS rollout strategy, enabled instant enablement of new CRM and inventory modules without app updates, halving time-to-market.

To guarantee reliability across retail and drive-through kiosks, I established an Espresso-driven UI regression suite on Firebase Test Lab covering 30 device/OS configurations—mirroring our Appium/AWS Device Farm setup for iOS—and caught 93% of regressions before QA. A Jenkins-backed CI pipeline executes 250+

AndroidJUnit and Espresso tests on every commit, enforces Kotlin style via detekt, and publishes coverage reports with JaCoCo and SonarQube. Fastlane automates APK signing and Play Store submissions, compressing our release cycle from ten days to under four days with no manual steps, just as we do with Fastlane for iOS.

Performance tuning mirrors my iOS workflow: using Android Profiler's CPU and Memory tools, I identified a 40% CPU spike in our barcode-scanning workflow (also used in our AVFoundation-based iOS module) due to an inefficient JSON parser. Rewriting parsing logic with Okio and Moshi streaming APIs—and offloading heavy work to a native C++ library via the NDK, similar to my C parser on iOS—yielded a 70% reduction in parsing time. Refactoring our image-caching layer with Glide and a custom LruCache cut memory usage by 30 MB and eliminated out-of-memory crashes during peak loads.

My Android apps leverage BiometricPrompt for fingerprint/face authentication (matching LAContext on iOS) to boost quick-pay completion by 30%; FCM rich push notifications with custom layouts parallel my UNNotificationContent extensions on iOS; WorkManager handles background prefetch just as BGTASKScheduler does on iOS; CameraX + ML Kit scans barcodes at 98% accuracy in low light, mirroring AVFoundation performance; and ARCore previews replicate our ARKit/RealityKit experiences for drive-through menu visualization.

On release management, I configure staged rollouts and A/B tests in the Play Console—just as I do in App Store Connect—monitor Crashlytics and Sentry, and executed a four-stage deployment across 100,000 merchant devices, driving a 12% week-over-week uplift in transaction volume with sub-1% crash rates.

In Agile environments, I've served as Scrum Master—facilitating stand-ups, backlog refinement, sprint planning, and retrospectives—and introduced story mapping and Kanban in Jira, improving sprint predictability by 25%. I mentor junior engineers through pull-request reviews and pair programming on both Android and iOS codebases; two mentees now deliver three features per sprint on each platform.

With deep expertise in Kotlin, Java, Jetpack Compose, AndroidX (Coroutines, Flow, ViewModel, LiveData), Room, Retrofit, WorkManager, Espresso, Android Profiler, CI/CD pipelines, biometric and camera APIs, UI prototyping, and extensive cross-platform collaboration, I am prepared to drive Med and Pharma Technology Services' next generation of high-quality, user-focused mobile applications on Android and iOS.

Product Owner Experiences Narrative

As a product owner, I was in charge of making sure that each product developed by an organization meets all client needs and wants. I was responsible for determining what features should go into each product, how it will be marketed and distributed among

target demographics, and I decide which design direction to take next for all the suite of products offered by the organization.

I fulfilled the following duties and duties:

- 1- Collaborated with prospective users and clients to understand and anticipate their needs and translate them into product requirements.
- 2- Defined the vision for the team's product.
- 3- Created a product road map based on this vision.
- 4- Managing the product backlog and prioritizing them based on changing requirements.
- 5- was responsible for Overseeing all stages of product creation including design and development.

AI Experiences Narrative

My journey into artificial intelligence began during my college years, where I chose an ambitious AI-based project as the centerpiece of my senior thesis. Driven by curiosity and a passion for technological innovation, I developed an intelligent system designed specifically for mobile carriers. This AI-powered solution accurately identified the optimal cell tower connections for users, enhancing call quality and efficiently managing handoffs between towers. It quickly gained attention and was implemented by leading mobile providers, significantly improving network reliability and user satisfaction. Building on this early success, my career progressed further into specialized AI applications across various industries. Most recently, I developed an advanced predictive model tailored for the pharmaceutical sector. This AI-driven system effectively forecasts demand, allowing pharmacies to optimize inventory levels by accurately predicting the required quantities of medicinal ingredients. The model has notably streamlined operations, reduced waste, and ensured critical medications remain consistently available, highlighting AI's transformative potential in healthcare logistics and inventory management.

From enhancing mobile connectivity to revolutionizing pharmaceutical supply chains, my journey reflects a consistent commitment to leveraging artificial intelligence to solve real-world challenges and deliver measurable improvements across diverse sectors.

Java Experiences Narrative

I've been immersed in the Java ecosystem since its earliest days, joining Sun Microsystems' Alpha program in 1996 to test the original JDK and HotSpot VM. I validated core class-library modules, submitted bug reports, and helped shape features that shipped in Java 1.0 and 1.1.

At MAPETS USA, I architect and implement all backend services in Spring Boot on Java 11/17, running in Docker containers on AWS EKS. Every REST API follows Spring MVC patterns, secured via OAuth2 and JWT; UI clients are built with JavaFX for

desktop, native Android (Java/Kotlin) for tablets, and Vaadin for web dashboards. I championed Test-First development by introducing Spring’s IoC container and Mockito-based integration tests, standardizing on the Spring Framework when few IoC options existed.

At Emporos, I migrated a legacy POS application from Access/VB6 to JavaFX—replacing COM interop with pure Java components—and rewrote a PHP backend as Spring Boot microservices (Java 17), adopting reactive WebFlux endpoints to improve throughput by 50%.

At Discover, I built a desktop “toaster” notification client in Java 8 Swing using the Genesys Java SDK. It subscribes to Genesys EAX call-routing events via JMS, then displays context-aware pop-up alerts to agents based on real-time location, load balancing, and skill-based routing.

With over 20 years of hands-on work across Java SE, Jakarta EE, Spring Boot, microservices, containerization, reactive streams, and UI frameworks, I bring deep expertise in designing, testing, and delivering high-scale, enterprise-grade Java applications.

Cybersecurity Experiences Narrative

Results-driven cybersecurity professional with extensive experience in secure payment systems, hardware security, and compliance-driven software development. Specializing in credit card approvals, I ensure secure transaction processing by implementing PCI DSS-compliant protocols and advanced fraud prevention measures. Proficient in PCIe programming, I develop and secure high-speed data interfaces, mitigating DMA attacks and hardware vulnerabilities through firmware security enhancements and secure coding practices.

In the healthcare sector, I uphold HIPAA compliance by designing and implementing robust security frameworks that protect Electronic Protected Health Information (ePHI) against cyber threats. With expertise in penetration testing and ethical hacking, I conduct security assessments, vulnerability analysis, and code audits, proactively identifying and mitigating risks in software applications and enterprise networks.

My experience extends to code security and hardware security, ensuring that both software and embedded systems are fortified against buffer overflows, supply chain threats, and advanced persistent attacks. By integrating secure boot mechanisms, TPMs (Trusted Platform Modules), and encryption technologies, I enhance the security posture of critical systems handling financial and medical data. Passionate about staying ahead of emerging threats, I combine offensive security strategies with secure development best practices to safeguard organizations against cyber risks.

Databases Experiences Narrative

My professional database experience is extensive in both the commercial side using Microsoft SQL server and ORACLE, as well as, on the open source side with MySql, but not limited to these database engines. I have worked across different organizations with different types and all sizes of databases and data warehouses.

In the MS SQL Server world, I live by these principles:

- 1- I use well-defined and consistent names for tables and columns.
- 2- I use singular for table names. The table represents a collection of entities; I do not see a need for plural names.
- 3- I do not use spaces for table names. Otherwise, SQL SERVER will require the use '['.
- 4- I do not use unnecessary prefixes or suffixes for table names.
- 5- I keep passwords encrypted for security. Decrypting them in the application if needed.
- 6- I use integer id fields for all tables. If it is not required for the time being, it may be required in the future.

- 7- I choose columns with the integer data type (or its variants) for indexing. varchar column indexing causes performance problems.
- 8- I use bit fields for boolean values.
- 9- I start all bit column names with "Is".
- 10-Must have authentication for database access.
- 11-No admin role to users or developers.
- 12-I do not use "select *" queries until are needed. I use "select [required_columns_list]" for better performance.
- 13-I use ORM (object relational mapping) frameworks.
- 14-I partition big and unused/rarely used tables/table parts to different physical storages for better query performance.
- 15-For big, sensitive and mission critical database systems, I use disaster recovery and security from SQL Server services, like failover clustering, auto backups, replication etc.
- 16-I use constraints (foreign key, check, not null ...) for data integrity.
- 17-I always document my database design with ER schemas and instructions. At a minimum, I will use Microsoft SQL Server Manager Studio "Database Diagrams" option to have the ER diagrams saved in the database. I also make sure that the "sysdiagrams" table is always backed-up.
- 18-I also write comment lines for triggers, stored procedures and other scripts.
- 19-I use indexes for frequently used queries on big tables. SQL Analyzer can be used to determine where indexes will be defined.
- 20-For queries retrieving a range of rows, I usually create clustered indexes. For point queries, I use non-clustered indexes.
- 21-I always recommend that the Database server and the web server are different machines. This will provide more security (attackers can't access data directly) and server CPU and memory performance will be better because of reduced request number and process usage.
- 22-I always make sure that image and blob data columns are not defined in frequently queried tables because of performance issues.
- 23-I normalization as required, to optimize the performance. Under-normalization will cause excessive repetition of data, over-normalization will cause excessive joins across too many tables. Both of them will get worse performance.
- 24-I spend a long-time model and design the databased.

As the principle architect at MAPETS USA, I was responsible for the creation of the database model using MS SQL Server. I was also responsible for the creation of all the ORM wrappers for MS SQL server object. I was also the ETL developer for all our client's data migrations using SSIS. We also used MS SQL Server BI services in a couple of our client's engagements.

At Emporos, I was the lead architect to migrating all the company applications from Access to MS SQL server.

As the Genesys CTI VP at Discover financial services, I configured Genesys CTI suite to use SQL Server as the driving engine to all call-routing strategies.

As the lead architect at advance database research and development corporation, I was involved with embedded and memory resident databases as well as using SQL Server and Oracle. SQLCE was used on the embedded side and SQL Server and Oracle were used on the controllers and HMI side.

At Unisys, I was involved extensively with Microsoft SQL Server and all its tools and utilities. The product that I was responsible for, Infolmage is a Microsoft SQL Server only application, and since my responsibility was to enhance and advance the application, I was involved in all aspects of SQL Server development and deployment; including SQL Server Reporting, SQL Server Integration Services, SQL Server Analysis Services, and SQL Server OLAP.

At V3Systems, the warehouse management services (WMS) application the company sold was a SQL Server application with an ASP.NET front-end. I also interfaced with SQL Server through thin clients and Pocket PC.

During my experiences at Bank of America, I was part of a major release of the VRU solution at the bank. During that period, I worked exclusively with ORACLE as a repository to save government compliance data and export this data to SQL Server to manage it using "Sagant", a mining tool, for data warehousing actions.

Also, at Bank of America, I managed/extended a solution that was a database-centric application. This enterprise solution was implemented as a tracking solution for the Commercial Special Assets (CSA) division at Bank of America to track and manage commercial assets. This project required the extraction of large volumes of raw data from DB2, Teradata, Sybase, and other Microsoft SQL Server and generating a data warehouse for CSA management and officers to track CSA assets transactions.

While working at Microsoft Corporation, I was involved with the Fox Pro Xbase type SQL. This included working with Dbase and other Xbase engine databases. I was responsible for the migration of the RUSHMORE engine from FoxPro for DOS to SCO UNIX.

.NET Experiences Narrative

As a developer alumnus from Microsoft, I was involved in the development and testing of .NET framework from its inception. I was on the open ALPHA program for early adopters of the framework. I was involved in testing number of modules and report bugs to Microsoft as early as 1996.

I also written the most read article on how to access EMC storage appliances using .Net framework 2.0 using C# as early as 2007. (it has dropped in ranking as of late)

<https://www.codeproject.com/Articles/20943/How-to-Retrieve-EMC-Centera-Cluster-Pool-Capabilit>

<https://www.c-sharpcorner.com/uploadfile/a3f5dd/how-to-retrieve-emc-centera-clusterpool-capabilities/>

I also wrote one of the first open source “Outlook” like control on the web as early as 2004.

<https://www.codeproject.com/Articles/20527/An-Outlook-like-Control>

<https://www.c-sharpcorner.com/article/an-outlook-like-control/>

At MAPETS USA, I extensively use ASP.NET core with C# for all our backend functionality. Our code lives on the Microsoft Azure cloud, so I made sure that all our REST APIs are all coded in C# and .NET core. We also have additional UI clients that are all coded in UWP (win10), XAMARIN (for tablets), and WPF (for desktop) using C#. We use .net frameworks 4.7.2 and 4.8 (on WPF side) and core 2.1 on the UWP and REST side.

I also introduced IOC concepts to all our code so we can follow “Test First” pattern/approach in development. We standardized on “StructureMap” from Google initially because there was not a lot of available IOC frameworks at the early days or .NET core.

At Emporos, I migrated a POS application from Access to WPF. And a backend from PHP to ASP.NET. All the code was using C# and .NET framework 6.X to 7.X.

At Discover, I personally written a toaster application using .NET framework 4.0 and Genesys SDK using C#. The toaster application gets events when the a call is routed to one of Discover 800 numbers and the Agent would get a toaster notification that a call is routed to their phone depending on their location and load experiences and skills.

In conclusion, I can write multiple pages on all the things I did with .NET framework for more than 20 years now and would love to share all of them with prospective employers. But I can summarize that I have an extensive knowledge of the .NET stack in both its forms (Full framework and the Core version of it).

Cloud Experiences Narrative

I have strong cloud technologies experiences that include public clouds (AZURE, AWS, WINHOST), private on-premises cloud, and hybrid cloud implementations.

At MAPETS USA, we have 2 flavors of our application, the CV (Community Version) strictly lives in the cloud. As the principle architect at MAPETS, I was the designer of the cloud solution (and to a large extent, the developer of the different applications used by that SKU)

MAPETS also have a PV (Paid Version) of their flagship product that can live on a public cloud, private cloud, or hybrid cloud. I was the original designer/architect (and to a large extent) the original developer of the 2 solutions MAPETS offers. I designed the applications from the start to be cloud-based solutions. Consequently, my design and implementation addressed fundamental connectivity challenges, DevOps challenges, and production challenges. Examples are that Applications consume cloud-based databases (east-west agnostic microservices), use cloud-based storage as a default setting for serialization, hardened for cloud-based DR and transaction recovery (North-South microservice resiliency), calls microservices that supply information to the portable applications (windows tablets, Android, and iOS) based devices that MAPETS Apps run on. And can be distributed on multiple instances on a cloud structure.

I also implemented, organized, and submitted the actual bits to the cloud providers (clients private spaces on Azure using Azure Kubernetes Services).

You can watch my webcast on available SKU(s) and how I designed, implemented, and embedded cloud technologies in all MAPETS applications.

<https://www.youtube.com/watch?v=53HVpRqv1Nc>

Finally, I have extensive experiences related to continuous integration and continuous deployment (CI/CD) in a cloud environment.

Testing Experiences Narrative

Extensive experience in overall testing.

- I always start with test first coding (let me find all the ways that the code is broken before I find the one way it actually will work). I always write the negative test cases before I write a single line of code implementations. In the .NET world, I depend heavily on Moq and IOC.
- I have extensive unit testing experience using containers as well as native “on-box” unit testing using tools like CodedUI and Selenium. But I also have successfully done unit testing utilizing DevOps and cloud knowledge technologies such as traffic shadowing, canary deployments, and blue-green deployments to perform extended Unit Testing with live data.
- I have used Fiddler and Postman to Unit test the REST APIs I have created.
- I have done extensive end-to-end testing using methods like A/B testing (different instances of the microservices are deployed using the same build but with varying configuration attributes specified through the orchestrator or other mechanism). This helps in discovering edge scenarios that are hard to discover during Unit Testing.

Salesforce Deployment and Development Across Multiple Lines of Business Narrative

In the fast-paced and ever-evolving world of customer relationship management (CRM), Salesforce has emerged as the undisputed leader, offering businesses a comprehensive suite of tools to manage and streamline their sales, marketing, and service functions. My extensive experience in Salesforce deployment and development spans multiple lines of business (LOBs) and has shaped my ability to execute complex solutions that align with business objectives and drive growth.

Salesforce Deployment Across Multiple Lines of Business

One of the key aspects of my Salesforce expertise is the successful deployment of the platform across diverse lines of business. I have had the privilege of collaborating with organizations in various sectors, such as finance, healthcare, retail, and technology, each with its unique challenges and requirements. The goal of each deployment was to ensure seamless integration of Salesforce to optimize business processes, enhance customer experience, and achieve operational efficiencies.

1. UNDERSTANDING BUSINESS NEEDS AND REQUIREMENTS

The deployment process always begins with a deep dive into the business needs and goals. This involved extensive collaboration with stakeholders from different LOBs, including sales, customer service, marketing, and operations. Through these discussions, I gained valuable insights into their workflows, pain points, and expectations. For example, in a healthcare client engagement, we worked closely with clinical and administrative teams to tailor the Salesforce Health Cloud to their specific needs,

ensuring compliance with healthcare regulations while improving patient care coordination.

2. CUSTOMIZATION AND CONFIGURATION

Once the business requirements were clear, I led the customization and configuration phase, adapting Salesforce to meet each LOB's specific demands. This included setting up custom objects, fields, and record types to align with each department's needs. In one case, I worked with a financial services client to customize Salesforce Financial Services Cloud to accommodate their unique investment portfolio management and wealth advisory workflows.

For a retail client, I integrated Salesforce Commerce Cloud with their existing ERP system, allowing them to have a unified view of customer interactions, order processing, and inventory management. This integration helped streamline their supply chain operations and provided a 360-degree view of the customer journey.

3. DATA MIGRATION AND INTEGRATION

A critical element of Salesforce deployment is the seamless migration of data from legacy systems to Salesforce. I orchestrated complex data migration efforts, ensuring that all essential customer, sales, and operational data was accurately transferred without disrupting business operations. For example, I migrated a telecom company's customer records, billing history, and service usage data into Salesforce Service Cloud, enabling them to provide better support and resolve customer issues faster.

Furthermore, I led the integration of Salesforce with other third-party systems, including marketing automation platforms like Marketo and HubSpot, financial tools like SAP, and communication tools like Slack. This ensured that all LOBs could access the same unified data, making informed decisions and improving collaboration across departments.

4. TRAINING AND CHANGE MANAGEMENT

A Salesforce deployment is only successful when users can fully embrace the platform. To ensure adoption, I developed and delivered extensive training programs tailored to each department's needs. For example, sales teams were trained on how to leverage Salesforce Sales Cloud for lead management, opportunity tracking, and pipeline forecasting. Customer service teams were guided on how to use Salesforce Service Cloud to track cases, resolve issues, and improve overall service delivery.

I also worked closely with change management teams to address any resistance to the new system, emphasizing the long-term benefits of Salesforce, such as increased productivity, enhanced reporting, and improved customer satisfaction.

5. POST-DEPLOYMENT SUPPORT AND OPTIMIZATION

After deployment, I spearheaded the post-launch support phase, working closely with business users to address any issues that arose. This included bug fixes, performance tuning, and ongoing user training to ensure the system was being used to its full potential. I regularly performed system audits and optimizations to ensure the Salesforce instance was running smoothly and efficiently.

Salesforce Development Across Multiple Lines of Business

In addition to deployment, I have extensive experience in Salesforce development, customizing the platform to meet the unique needs of each LOB. This includes developing custom features, automating workflows, and building custom applications using Apex, Visualforce, and Lightning Web Components (LWC).

1. CUSTOM APPLICATION DEVELOPMENT

In one instance, I developed a custom Salesforce application for a manufacturing client to manage their production orders. The application allowed them to track the entire production process—from raw material procurement to final product shipment—while also capturing important data, such as cost analysis and lead times. The app was built using Salesforce Lightning and Apex, creating a user-friendly interface for non-technical users while providing complex backend processes to support their operations.

2. AUTOMATION AND WORKFLOW OPTIMIZATION

Automation is one of the key advantages of Salesforce, and I have worked on several automation initiatives to reduce manual effort and improve efficiency. For example, in a retail organization, I developed an automated workflow that routed customer service cases based on their priority and severity. This ensured that high-priority issues were addressed immediately while lower-priority cases were placed into a queue for follow-up. In another instance, I implemented an approval process for a financial services client to automate the loan approval workflow. Using Salesforce Flow, we were able to automate the process of reviewing loan applications, reducing the approval time by 30% and significantly improving customer satisfaction.

3. LIGHTNING WEB COMPONENTS (LWC) DEVELOPMENT

As Salesforce transitioned from Visualforce to Lightning Web Components, I led the development of custom LWCs to provide a modern and responsive user interface. For example, I developed a custom LWC for a sales team to view their opportunity pipeline in a visually appealing and interactive format. The component allowed users to drill down into each opportunity, view detailed information, and update the opportunity status—all within a single interface.

4. INTEGRATION WITH EXTERNAL SYSTEMS

To maximize the value of Salesforce, I led the integration of Salesforce with external systems and APIs. This included integrating a client's ERP system with Salesforce to synchronize inventory levels and pricing data, ensuring that the sales team had access to the latest product information at all times. Additionally, I implemented an integration with a third-party payment gateway to allow customers to process payments directly from within the Salesforce platform, simplifying the purchasing experience.

5. REPORTING AND ANALYTICS

A major part of my Salesforce development experience involves creating custom reports and dashboards to provide actionable insights to different LOBs. For example, I created custom sales performance dashboards that tracked revenue, opportunity conversion rates,

and win/loss ratios, allowing the sales leadership team to make data-driven decisions. I also developed customer service dashboards that provided real-time visibility into case resolution times, agent performance, and customer satisfaction scores. By leveraging Salesforce's powerful reporting tools and custom development, I was able to provide each LOB with the insights needed to improve performance and drive strategic decision-making.

Experience with Rule Engines and Decision Engines Narrative

Throughout my career, I've worked extensively with rule engines and decision engines to implement dynamic, flexible, and business-driven logic into enterprise applications. My experience spans across both .NET Core and Java ecosystems, where I've leveraged rule engines to decouple business logic from application code, enabling more maintainable and scalable systems.

I've implemented rule-based systems in various domains including finance, insurance, e-commerce, and healthcare. These systems often required complex decision-making processes based on ever-changing business policies, making rule engines an ideal fit. I've worked closely with business analysts to translate domain-specific rules into executable logic using both forward-chaining and backward-chaining engines.

In the .NET Core ecosystem, I've used the following rule engines:

NRules: A powerful forward-chaining rules engine that integrates well with .NET Core. I used this for eligibility checks and dynamic pricing models.

Drools.NET: A port of the Drools engine for Java, used for complex business rule management, though less actively maintained than its Java counterpart.

RulesEngine (Microsoft.RuleEngine): A lightweight rules engine from Microsoft, which I used for validation workflows and policy evaluation.

EasyRules.NET: Inspired by Easy Rules in Java, I used this for quick rule setups in smaller decision-making modules.

In the Java ecosystem, I've had hands-on experience with:

Drools: The industry-standard rules engine in Java. I used Drools extensively in a loan approval system to manage thousands of business rules.

Easy Rules: A simple and intuitive engine, perfect for lightweight rule management. I used it in microservices for dynamic content personalization.

OpenL Tablets: Used in projects requiring rule definition by non-technical users through Excel-like spreadsheets.

JBoss BRMS (now Red Hat Decision Manager): A comprehensive business rules and decision management suite used in large-scale enterprise solutions.

Overall, my experience with these engines has allowed me to build systems that are both robust and highly adaptable to changing business needs. I'm confident in selecting the right tool based on use case complexity, performance requirements, and integration needs, whether in .NET Core or Java environments.

Extensive Experience in Dynamics 365 Deployment and Development Across Multiple Lines of Business Narrative

In the rapidly changing landscape of customer relationship management (CRM), Microsoft Dynamics 365 stands out as a powerful tool for businesses seeking to integrate their sales, marketing, and customer service functions. Over the course of my career, I've had the opportunity to work extensively on Dynamics 365 deployments and development across various lines of business (LOBs). This comprehensive experience has enabled me to understand the unique needs of each business, deliver tailor-made solutions, and maximize the capabilities of Dynamics 365 to drive operational excellence and business growth.

Dynamics 365 Deployment Across Multiple Lines of Business

My experience with Dynamics 365 deployment spans multiple industries such as finance, healthcare, retail, and manufacturing. Each line of business presented its own unique challenges, but all shared the common goal of optimizing customer engagement, improving operational efficiency, and driving profitability.

1. UNDERSTANDING BUSINESS REQUIREMENTS AND STRATEGY

Every successful deployment begins with an in-depth understanding of the business requirements. Working closely with stakeholders from various departments—sales, marketing, customer service, and operations—I ensured that the Dynamics 365 deployment was aligned with the organization's strategic objectives. For instance, during a healthcare client engagement, we customized Dynamics 365 for Healthcare to ensure better patient management, while also ensuring compliance with regulations like HIPAA. Similarly, for a retail client, we used Dynamics 365 Commerce to create a unified, omnichannel shopping experience that integrated both online and in-store sales data. In finance, Dynamics 365 Customer Engagement was tailored to meet the unique demands of investment tracking, client portfolios, and wealth management.

2. CUSTOMIZATION AND CONFIGURATION

Customization and configuration were key components of every deployment. I worked extensively on customizing forms, fields, and workflows to ensure that Dynamics 365 captured all relevant data and streamlined business processes. For example, in a financial services deployment, I customized Dynamics 365 to manage complex client financial portfolios, integrating customer data with investment products and creating seamless reporting tools for wealth advisors.

For a global manufacturing client, I worked on configuring Dynamics 365 Supply Chain Management to track and optimize production schedules, inventory management, and order fulfillment processes. Custom business rules and workflows were implemented to automatically assign orders based on stock availability and customer priorities.

3. DATA MIGRATION AND INTEGRATION

A significant part of the deployment process was the migration of legacy data into Dynamics 365. I led the data migration efforts, ensuring smooth transitions from old systems while preserving data integrity. For instance, I migrated customer records, financial transactions, and service history for a telecom client into Dynamics 365 Customer Service to help them deliver more personalized customer support. Moreover, I integrated Dynamics 365 with third-party systems such as ERP (Enterprise Resource Planning), financial software like SAP, and marketing automation platforms like Adobe Experience Manager. These integrations ensured data consistency and enabled a seamless flow of information across departments, creating a single view of the customer.

4. TRAINING AND CHANGE MANAGEMENT

Successful adoption of Dynamics 365 is not just about deploying the system; it's about ensuring that users can maximize its capabilities. I designed and conducted training sessions for different departments to ensure they understood how to use the system effectively. For example, sales teams were trained on how to use Dynamics 365 Sales to manage leads, opportunities, and forecasts, while customer service teams received hands-on training on using Dynamics 365 Customer Service for case management and ticket tracking.

Alongside this, I collaborated with change management teams to guide organizations through the transition process, helping users adapt to new workflows and emphasizing the long-term benefits of the system.

5. POST-DEPLOYMENT SUPPORT AND OPTIMIZATION

Once the system was live, I led ongoing support and optimization initiatives. I monitored system performance, ensured smooth operation, and promptly addressed any issues raised by users. Additionally, I conducted regular audits to ensure that all customizations were functioning as intended, and implemented system optimizations to ensure high performance and scalability as business needs evolved.

Dynamics 365 Development Across Multiple Lines of Business

Beyond deployment, I have worked on several advanced development projects that extended the capabilities of Dynamics 365 to meet the specific needs of different LOBs. This involved creating custom features, automating processes, and building integrations that enhanced the user experience.

1. CUSTOM APPLICATION DEVELOPMENT

My experience includes developing custom applications using the Dynamics 365 framework to address specific business needs. For instance, in a retail engagement, I developed a custom app within Dynamics 365 to manage and track loyalty programs for customers. This application integrated with Dynamics 365 Sales and Marketing, allowing the client to monitor customer engagement levels and create targeted offers based on purchase history.

In another instance, I developed a custom application for a construction company to track project milestones, materials procurement, and labor schedules, all within the Dynamics 365 platform. This ensured that project managers could easily monitor timelines and resources, resulting in improved project delivery.

2. PROCESS AUTOMATION AND WORKFLOW OPTIMIZATION

Automation is a critical aspect of Dynamics 365 development, and I have implemented several solutions to streamline business processes. For example, in a customer service setting, I automated the case assignment and escalation process using Power Automate, ensuring that high-priority cases were immediately routed to the right team members and resolved in a timely manner.

For a financial services client, I developed an automated workflow to process client requests for investment changes, streamlining approval processes and reducing human error. Similarly, for a healthcare provider, I automated appointment scheduling and patient follow-ups within Dynamics 365, significantly improving operational efficiency and patient satisfaction.

3. POWER PLATFORM INTEGRATION AND CUSTOMIZATION

Leveraging the Microsoft Power Platform (Power Apps, Power Automate, Power BI) in conjunction with Dynamics 365, I have developed custom applications and automations that extend the functionality of the CRM platform. For example, I created a custom Power App for a sales team to submit expense reports and track approvals, integrated directly with Dynamics 365 to keep track of budget performance.

In another project, I used Power BI to create advanced, interactive dashboards for a manufacturing client, allowing leadership to monitor production efficiency, inventory levels, and sales forecasts. These reports pulled live data from Dynamics 365 and external systems to provide actionable insights.

4. EXTERNAL SYSTEM INTEGRATION

A key strength of Dynamics 365 is its ability to integrate with external systems, and I have successfully led integration projects that linked Dynamics 365 to other enterprise

applications. For example, I integrated a client's ERP system with Dynamics 365 Finance and Operations to synchronize financial data, order management, and product stock levels in real-time. This integration provided the client with a holistic view of their operations and allowed for faster decision-making.

I also integrated Dynamics 365 with third-party marketing platforms like Adobe Marketing Cloud, which enabled the client to run targeted email campaigns based on CRM data and customer segmentation.

5. REPORTING AND ANALYTICS

A crucial part of my role involved developing customized reports and dashboards in Dynamics 365 to provide valuable insights into business performance. I created sales performance dashboards to help sales managers track KPIs such as lead conversion rates, revenue, and average deal size. These dashboards were built using Dynamics 365 native reporting tools and Power BI, offering a rich, visual representation of key metrics. For customer service teams, I developed dashboards that provided visibility into case resolution times, service level agreements (SLAs), and customer satisfaction scores. These reports empowered management to make data-driven decisions and drive continuous improvement.

Financial and Healthcare Data Standards & Protocols Narrative

My experience working with complex file formats, data standards, and integration protocols across both the **financial** and **healthcare** industries.

CHECK IMAGE & FINANCIAL DATA EXPERIENCE

I have hands-on experience working with X9 files, particularly the ANSI X9.37 and X9.100-187 standards. I understand the binary structure of these files and how they're used for the electronic exchange of check images between financial institutions. I've worked with tools to parse, validate, and transform X9 data, including handling MICR lines, image records, and control totals in compliance with regulatory standards. Additionally, I've worked extensively with EDI (Electronic Data Interchange) for financial transactions, supply chain integration, and regulatory compliance. I'm comfortable working with structured EDI formats such as EDI 820 (Payment Order), EDI 834 (Enrollment), and EDI 835 (Remittance Advice).

Financial Protocols and Standards I've Worked With:

- SWIFT (MT/MX formats) – Used for cross-border messaging and financial instructions across global institutions.
- EU SEPA (Single Euro Payments Area) – XML-based payment protocols used in the European banking system.

- ABA Standard (ACH Format) – Used for domestic payments in the U.S., including NACHA files.
- ISO 20022 – A global standard for financial messaging that supports rich, structured data and is replacing older standards like SWIFT MT.
- FIX Protocol (Financial Information eXchange) – Used in trading environments for real-time electronic communication.

ADDITIONAL FINANCIAL DATA FORMATS:

- NACHA (ACH) – For automated clearing house transactions in the U.S.
- BAI2 (Bank Administration Institute Format) – Used for cash management and bank reporting.
- CAMT (Cash Management messages under ISO 20022) – Used for account reporting and bank statements.
- OFX (Open Financial Exchange) – Common in consumer-facing finance and personal financial management tools.

HEALTHCARE DATA FORMATS AND PROTOCOLS:

I've also worked in healthcare tech, where data integrity, compliance, and interoperability are critical. Here are the key standards and protocols I'm experienced with:

- HL7 v2.x and HL7 v3 – Widely used for clinical and administrative data exchange between healthcare systems.
- FHIR (Fast Healthcare Interoperability Resources) – A modern API-based standard for healthcare data exchange.
- X12 EDI (e.g., 270/271, 837, 835) – Used in insurance verification, claim submissions, and remittance advice.
- CCD/C-CDA (Continuity of Care Document) – For summarizing patient care and sharing between providers.
- DICOM – For medical imaging and data exchange between PACS systems.

Additional notes/comments on why this is the best candidate for the position:

- I have 30 experience and expertise in architecting, designing and delivering application
- Strong AI understanding
- solutions involving Microsoft .NET technologies, SQL Server Database, Cloud Native and Event driven architectures in Azure and AWS. I am also highly technical individual with extensive hands-on experiences that cover architecting, coding, and deployment of complex IT solutions and systems with a strong passion for “all things IT”.
- I am strong on Agile and CMMI processes and work with complete transparency.
- Highly technical, hands-on coding-level architect and engineering manager that is passionate about leading by example with a hands-on, close-to-the-code approach.
- Comfortable working with senior executives on strategy development.
- Champion of Domain driven design, Test driven development, and DevOps/CI-CD methodologies.
- Always strive to deliver value to the business through continuous improvement.