

PROFESSIONAL SUMMARY

Principal Software Architect and technology leader with 20+ years of experience designing, modernizing, and scaling high-transaction enterprise platforms where performance, reliability, security, integration complexity, and operational continuity directly affect revenue and customer experience. Background spans eCommerce, omnichannel retail, customer identity, API ecosystems, distributed services, cloud platforms, content operations, automation, and AI-enabled engineering.

Trusted by organizations including Cisco/Splunk, GoToFoods, Adobe Commerce clients, Central Group, and LeapFrog/VTech to solve complex platform problems, lead engineering teams, and convert ambiguous business and technical needs into production-grade systems. Currently completing a PhD in Technology Management and Innovation, with applied research focused on AI reliability, RAG, hallucination reduction, claim-level verification, and quality systems for technical platforms.

SELECTED IMPACT

Designed automation architecture for enterprise content and commerce operations, reducing propagation of customer-facing menu/content updates from multi-day cycles to same-day execution through synchronization services, validation workflows, metadata enrichment, and controlled admin dispatching.

Led technical execution for a distributed team of 12 engineers across platform modernization, AI-enabled automation, production readiness, release planning, sprint operations, architecture alignment, and cross-functional delivery.

Influenced architecture standards across an engineering organization of approximately 150 engineers supporting high-traffic retail platforms with millions of daily requests.

Applied doctoral research in AI reliability, RAG, hallucination reduction, claim-level verification, and quality systems to production-oriented AI engineering, documentation, and platform automation patterns.

ARCHITECTURE FOCUS

Enterprise Platforms: Modernization, API contracts, cloud architecture, integration governance, security patterns, cost/performance tradeoffs, and operating models.

Commerce & Digital Experience: Adobe Commerce / Magento, pricing, inventory, checkout, loyalty, customer identity, content synchronization, and transactional consistency.

AI-Enabled Systems: RAG, LLM evaluation, hallucination reduction, AI quality gates, semantic classification, automation pipelines, and claim-level verification.

Technical Leadership: Architecture governance, distributed teams, delivery risk management, stakeholder alignment, engineering standards, and production readiness.

PROFESSIONAL EXPERIENCE

CISCO / SPLUNK - PRINCIPAL ARCHITECT, PX PLATFORMS 2022 - PRESENT

Shapes technical direction for the Product Experience group, leading architecture decisions across customer-facing platforms, internal engineering systems, content operations, automation, AI-enabled workflows, platform modernization, and developer productivity initiatives.

Led technical execution for a distributed engineering team of 12 engineers, owning delivery coordination, architecture alignment, release planning, sprint operations, code quality, production readiness, and cross-functional stakeholder communication across complex platform initiatives.

Drives adoption of modern automation and AI implementation patterns, including on-prem n8n workflow orchestration, specialized AI agents, MCP-style tool dispatching, validation pipelines, review workflows, and service automation for writing, production, verification, migration, and operational support.

Leads modernization from legacy MediaWiki/PonyDocs infrastructure toward structured content pipelines, Heretto/DITA integrations, API-based services, automated conversion, metadata governance, quality guards, and observable delivery models.

Built and maintained middleware, release-note automation, feedback services, authentication and authorization support, migration tooling, redirect/mapping systems, localization support, and front-end platform enhancements.

Designed and improved platform capabilities involving global navigation, user tracking, language selectors, content security policies, analytics instrumentation, versioning logic, search experience, customer-facing delivery performance, and high-traffic platform reliability.

Coordinates architecture decisions across product, engineering, content, localization, security, and operations teams, translating ambiguous platform needs into executable technical direction, service contracts, delivery plans, and measurable production outcomes.

GOTOFOODS/FOCUS BRANDS - CONSULTING ENTERPRISE ARCHITECT 2024 - PRESENT

Architected restaurant technology platforms across Olo, Contentful, Punchh, loyalty, customer identity, CMS operations, mobile-app integrations, checkout flows, Azure services, and operational automation.

Designed Olo-to-Contentful synchronization services using orchestration patterns, metadata enrichment, delta processing, validation workflows, and admin-triggered dispatching to reduce menu/content propagation from multi-day cycles to same-day operational execution.

Defined integration patterns for AI-assisted automation, MCP-style tool dispatching, identity mapping, offer validation, loyalty processing, menu/content governance, and downstream operational systems while preserving stable contracts for mobile apps and backend services.

Advised on customer-facing production issue analysis using Noibu, Quantum Metric, logs, trace correlation, behavioral analytics, and architecture-level root-cause analysis.

Supported architecture decisions around inventory constraints, menu synchronization, offer consistency, identity resolution, AI-assisted operational workflows, and transaction-sensitive customer journeys.

PROFESSIONAL EXPERIENCE

CENTRAL GROUP - HEAD OF ARCHITECTURE 2020 - 2022

Led architecture strategy for one of Southeast Asia's largest retail ecosystems, supporting high-traffic commerce platforms across Central, Tops, Supersports, and additional Central Group brands with millions of daily requests and complex multi-brand operational requirements.

Led and influenced a technology organization of approximately 150 engineers as Head of Architecture, setting architectural direction, engineering standards, governance practices, technical decision frameworks, and production-readiness expectations across distributed teams.

Helped shape the next generation of eCommerce architecture by modernizing platform patterns, improving scalability, strengthening reliability, and aligning technology decisions with aggressive digital growth across retail, grocery, sports, department-store, and marketplace-style business models.

Solved complex architecture challenges involving high-volume traffic, catalog scale, pricing, promotions, checkout flows, brand-specific requirements, shared services, integrations, cloud infrastructure, performance bottlenecks, deployment reliability, and operational continuity.

Drove architecture governance across engineering teams, vendors, and business stakeholders, improving technical decision-making, delivery quality, security posture, vendor alignment, and long-term maintainability.

Designed architecture patterns for international expansion, multi-brand reuse, platform consolidation, and cost optimization while improving partner agreements, execution quality, and customer-facing platform performance.

ADOBE COMMERCE ECOSYSTEM CLIENTS - SOLUTION ARCHITECT 2014 - 2020

Provided architecture leadership for complex Adobe Commerce and Magento ecosystems supporting high-transaction, multi-brand, and customer-facing digital commerce operations across enterprise retail, telecommunications, logistics, consumer products, restaurant technology, and marketplace-style environments.

Architected and advised on commerce solutions for major brands and enterprise programs including Adobe, T-Mobile, Nintendo, FedEx, The Home Depot, Chick-fil-A, Lovesac, LeapFrog/VTech, and additional Adobe Commerce / Magento clients requiring scalable, secure, and extensible platform design.

Designed enterprise commerce architectures involving checkout, pricing, promotions, inventory, catalog operations, customer identity, GraphQL/REST APIs, third-party integrations, asynchronous processing, RabbitMQ queues, indexing, cache layers, CDN behavior, cloud constraints, deployment strategy, and extension governance.

Led solution design for complex pricing, promotion, and inventory scenarios, including external pricing engines, dynamic price overrides, promotion labels, cart calculation delegation, PLP-level availability checks, checkout validation, source-of-truth synchronization, fallback behavior, and oversell prevention.

Defined security and API architecture for commerce platforms, including WAF rules, anti-spoofing headers, secure token handling, API gateway validation, customer session handling, fraud-resistance considerations, and operational logging for invalid-token and failed-validation scenarios.

Guided engineering teams on Adobe Commerce best practices, module boundaries, dependency control, database impact, performance profiling, cache strategy, queue design, extension review, production debugging, release readiness, and maintainable customization patterns.

TECHNICAL SKILLS

Architecture & Platform Engineering: Enterprise architecture, platform modernization, high-transaction systems, distributed systems, microservices, API orchestration, event-driven architecture, cloud architecture, reliability engineering, performance engineering, scalability design, security architecture

AI, Automation & Agentic Systems: AI-enabled engineering, AI agents, MCP-style tool dispatching, on-prem n8n automation, RAG systems, LLM evaluation, hallucination reduction, claim-level verification, semantic classification, re-ranking, AI quality gates, human-in-the-loop validation

Languages & Backend Engineering: PHP, JavaScript, TypeScript, Node.js, Python, Shell scripting, SQL, REST APIs, GraphQL, middleware, backend service design, custom modules, queue-based processing, asynchronous jobs

Commerce & Retail Platforms: Adobe Commerce, Magento, Adobe Commerce Cloud, checkout architecture, pricing engines, promotion orchestration, catalog architecture, inventory strategy, loyalty systems, customer identity, omnichannel flows, multi-brand commerce

Data, Messaging & Integration: MySQL, PostgreSQL, Redis, DynamoDB, MSSQL, RabbitMQ, Kafka, SNS, SQS, data synchronization, delta processing, metadata enrichment, cache invalidation, indexing, API gateway patterns

Cloud, DevOps & Infrastructure: AWS, Azure, Docker, NGINX, Apache, Linux, CloudFront, S3, CI/CD, GitHub Actions, deployment automation, CDN strategy, WAF/security rules, release readiness

Frontend & Experience Engineering: React, Vue.js, Preact, HTML5, CSS3, Bootstrap, jQuery, global navigation systems, localization, accessibility, SEO-sensitive delivery, content security policies, analytics instrumentation

Observability, Quality & Diagnostics: Noibu, Quantum Metric, Pendo, Google Tag Manager, production incident analysis, root-cause analysis, trace correlation, log analysis, performance diagnostics, Selenium, Cypress, PHPUnit, JUnit, Vitest

Enterprise Platforms & Ecosystems: Contentful, Olo, Punchh, Okta, Auth0, Firebase App Check, MediaWiki, PonyDocs, Heretto, DITA, Databricks, Azure ML

EDUCATION & RESEARCH

PHD IN TECHNOLOGY MANAGEMENT AND INNOVATION

UTEL — Expected 2026

MASTERS IN COMPUTER SCIENCE

UTEL — 2021

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

UTEL — 2009