

Summary

Product-focused engineer with 15+ years of experience building backend systems, APIs, and distributed platforms that power real-world applications. Designs and delivers intelligent systems that connect data, behavior, and human context into adaptive, production-ready solutions.

Builds systems across embeddings, retrieval (RAG), and LLM-integrated pipelines, combining backend architecture, data pipelines, and product thinking to enable context-aware decision systems at scale. AI Product Support: API debugging, system behavior analysis, user-facing issue resolution

Core Capabilities

AI Systems: Embeddings, Vector Search, Retrieval (RAG), LLM Pipelines

Backend Engineering: APIs, Distributed Systems, Microservices

Data Systems: Pipelines, Feature Engineering, Signal Processing

Cloud Platforms: AWS (Lambda, S3, RDS), Azure

Product Execution: Release ownership, cross-functional delivery

System Design: Context-aware systems, real-world data handling

Career Experiences

Product Lead, Yum Brands, Dallas, TX

Apr 2024 – Present

- Designed and built AI-assisted predictive suggestion capabilities within Menu Request Hub, translating user intent into real-time configuration recommendations during search and authoring
- Owns end-to-end development of an enterprise menu platform (MOA), including backend services, APIs and frontend workflows
- Developed and validated API contracts (JSON/XML/YAML), ensuring reliable request-response flows across distributed services
- Improved system performance and scalability by leveraging AWS services, while enhancing observability through CloudWatch and Datadog dashboards
- Bridged product and engineering by translating requirements into system design decisions and driving implementation alignment
- Contributed to integration of enterprise AI capabilities (Crave AI), ensuring safe and reliable incorporation into production workflows

Product Analyst, PACCAR, Lewisville, TX

Oct 2023 – Apr 2024

- Contributed to PACCGPT, an enterprise AI-driven knowledge interface, supporting system integration, data flow validation, and debugging across enterprise workflows
- Helped define product-driven integration pathways for Connected Vehicle Platform (CVP), aligning diagnostic and fleet data with system-level use cases
- Worked on event-driven architecture and Azure-based data pipelines to support system modernization and improve data flow across systems

Syed Zameer M

- Helped shape API integrations and data flows across distributed enterprise systems, ensuring reliable system communication
- Translated product requirements into structured data models and engineering workflows, aligning event-driven inputs with system design and implementation
- Performed data normalization and transformation of large-scale XML/JSON event data using Python, structuring datasets into Snowflake tables for downstream use

Technical Product Owner, Toyota Motors, Plano, TX

Sep 2021 – Jul 2023

- Led API mapping and end-to-end data flow design across legacy and cloud-native systems
- Supported AWS migration and microservices transformation initiatives
- Defined system requirements and integration patterns for scalable backend architecture
- Aligned stakeholders across product and engineering to ensure consistent delivery

Technical Analyst, United Airlines, Houston, TX

Feb 2020 – Sep 2021

- Supported development of customer-facing mobile systems across full lifecycle
- Conducted gap analysis and modernization planning for legacy-to-cloud transitions
- Ensured API compatibility and performance across platforms
- Collaborated across engineering and design teams for delivery execution

Earlier Experiences, (Aspire Systems, NTT Data, Wipro)

Sep 2009 – Dec 2020

- Worked on enterprise systems across healthcare, finance, and retail domains, supporting high-volume transactional workflows
- Implemented data processing and automation pipelines using SQL/Python for structured transformation, validation
- Contributed to large-scale systems involving compliance, integrations, and performance-sensitive processing
- Supported system reliability through testing, validation, and cross-team coordination across Agile delivery cycles

Projects & Applied Systems

TruSic (Context-Aware Music Intelligence System)

- Built an AI system that retrieves music based on real-time human state instead of static listening history
- Models human state using behavioral triggers and physiological signals, mapped into a shared embedding space
- Implements vector similarity search (pgvector) to align internal state with music selection
- Designed a modular pipeline for trigger ingestion, state modeling, and retrieval-based suggestions ([Code](#))
- Designed early-stage learning loop using behavioral signals (skip, replay, duration) to evolve state-to-music alignment

AI Resume System (RAG-based Interactive System)

- Built a retrieval-augmented generation (RAG) system over a structured personal corpus
- Implements chunking, embeddings, retrieval, and LLM response generation
- Enables conversational interaction with systems and experience instead of static resume consumption

Syed Zameer M

- Debugged and refined retrieval quality through query analysis, LLM evaluation, and response benchmarking (local inference with Ollama)
- Integrated FastAPI backend with lightweight frontend for real-time interaction ([Code](#))

Unnamed Health Engine (Adaptive Intelligence Pipeline)

- An end-to-end system converting physiological data (Oura) into structured health signals and adaptive guidance
- Combines rule-based reasoning with LLM-generated outputs for human-readable recommendations
- Designed for real-world reliability, handling API failures, missing data, and variability
- Automated pipeline using scheduled workflows with GitHub Actions

Technology Stack

Languages & Data: Python, Java, SQL, PostgreSQL (pgvector), MySQL, Snowflake

AI & ML: PyTorch, TensorFlow, scikit-learn, Embeddings, Vector Search (pgvector), Retrieval (RAG), LLM Inference (Ollama), LLM Evaluation, Prompt Structuring, LangChain

Cloud: AWS (Lambda, S3, RDS, API Gateway), Azure (Data Factory, Functions, SQL)

Systems: Microservices, Distributed Systems, Event-Driven Architecture, Kubernetes

Frameworks & Tools: FastAPI, Postman, Swagger, Splunk, Datadog, CloudWatch, GitHub Actions, Jira

Certifications

AWS Certified Solutions Architect

Google IT Automation with Python

Certified Kubernetes Application Developer (In progress)