



AI & SOFTWARE ENGINEERING

Capability Statement & Delivery Portfolio

This document summarizes the full technology stack our team delivers against, followed by a representative portfolio of diverse projects completed across healthcare, banking & financial services, insurance, EdTech, enterprise HR, retail, and martech domains — demonstrating breadth across the AI, data, automation, and full-stack engineering lifecycle.

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Section 1 — Complete Technology Stack

The table below consolidates every technical domain our delivery team covers, from front-end and back-end engineering through data architecture, classical ML/DL, NLP/CV, generative and agentic AI, and business intelligence.

Category	Core Technologies & Tools	Representative Capabilities
Frontend Development	React.js, Next.js, Vue.js, TypeScript/JavaScript, Tailwind CSS, Redux/Zustand, React Native	Web & mobile UI, admin consoles, client-facing portals, cross-platform apps
Mobile Development	React Native, Flutter, Swift/SwiftUI (iOS), Kotlin/Jetpack Compose (Android), Appium, Firebase (push/analytics)	Native & cross-platform mobile apps, offline-first sync, background location & push notifications, app-store release management
Backend Development	Node.js (Express/NestJS), Python (FastAPI, Django, Flask), Java (Spring Boot), REST & GraphQL APIs	API services, business logic layers, service integrations, auth/session management
Full-Stack Frameworks	MERN/MEAN stacks, Next.js + Node, Django + React, Laravel + PostgreSQL	End-to-end product builds from a single delivery team
Databases (Relational)	PostgreSQL, MySQL, MS SQL Server, Amazon RDS, TimescaleDB	Transactional systems, financial/time-series data, multi-tenant SaaS
Databases (NoSQL, Cache & Vector)	MongoDB, Redis, Memcached, DynamoDB, Apache Cassandra, ScyllaDB, Weaviate, Pinecone, ChromaDB	High-throughput distributed stores, sub-millisecond caching, session stores, semantic search & RAG knowledge bases at 10M+ object scale
Data Engineering	Apache Kafka, Airflow, Apache Spark, dbt, CDC pipelines, Databricks	Streaming pipelines, batch ETL, delta-update architectures, workflow orchestration
Test Automation & QA Engineering	Pytest, Selenium, Playwright, Cypress, JMeter/Locust, Postman/Newman	Automated regression suites, cross-browser UI testing, API contract testing, load & performance testing, CI-gated release quality
Agentic & No-Code Automation	n8n, Zapier, Make (Integromat), LangGraph tool-calling agents	Cross-system workflow automation (CRM/ERP/SaaS), event-triggered business processes, agentic task orchestration without custom glue code
Data Architecture	Data lakes/warehouses, Snowflake, BigQuery, Redshift, Delta Lake, Kimball/Data Vault modeling	Enterprise data platform design, schema modeling, multi-region compliant architectures (HIPAA/DPDP)
Data Science & Statistical Learning	Pandas, NumPy, SciPy, Statsmodels, hypothesis testing, ARIMA/Prophet, survival analysis	EDA, forecasting, A/B testing, cohort and survival analysis for conversion



Category	Core Technologies & Tools	Representative Capabilities
		optimization
Machine Learning	Scikit-learn, XGBoost, LightGBM, Random Forest, ensemble methods, Optuna (hyperparameter tuning)	Classification/regression models, churn prediction, scoring engines, recommendation systems
Deep Learning	PyTorch, TensorFlow/Keras, CNNs, RNN/LSTM, Transformers, Physics-Informed Neural Networks (PINNs)	Sequence modeling, financial time-series prediction, hybrid physics-ML architectures
Natural Language Processing (NLP)	spaCy, HuggingFace Transformers, BERT/GPT fine-tuning, NER, sentiment & intent analysis	Call transcript analysis, document intelligence, entity extraction, text classification at scale
Computer Vision (CV)	OpenCV, YOLO, image classification/segmentation, OCR (Tesseract, Google Vision, Gemini Vision)	Document OCR pipelines, handwriting recognition, image-based evaluation systems
Generative & Agentic AI	OpenAI, Anthropic Claude, Google Gemini APIs, LangChain, LangGraph, RAG pipelines, multi-agent orchestration	Autonomous agents, agentic workflows, retrieval-augmented assistants, prompt engineering & evaluation (Ragas)
System Design & Cloud Architecture	Microservices, event-driven architecture, AWS (ECS Fargate, EC2, S3, RDS), Azure, GCP, Docker, Kubernetes	Scalable multi-region deployments, service decomposition, high-availability system design
DevSecOps & Security	GitHub Actions CI/CD, TruffleHog, Bandit, Semgrep, OWASP ZAP, Trivy, OIDC/IAM hardening	Secure-by-design pipelines, SAST/DAST gating, vulnerability scanning, compliance-ready deployments
Data Analytics & BI	Power BI, Tableau, Qlik Sense, Apache Superset, Looker, interactive HTML dashboards	Executive dashboards, KPI tracking, self-serve reporting, BI platform migrations

Section 2 — Diversified Project Portfolio

The following 13 projects illustrate the breadth of industries and problem types this stack has been applied to — spanning healthcare, banking & financial services, insurance, EdTech, enterprise HR, retail, logistics, and enterprise data platforms.

1. CareSync — Care Intelligence Platform for Supported Living Providers

Healthcare / Care-Tech

End-to-end platform for supported-living operators, covering resident records, medication administration tracking, AI-assisted shift handovers, incident logging, and family communication — built on React, Node.js, and PostgreSQL. A generative-AI summarization layer condenses shift notes into structured handover briefs, while a Playwright/Pytest-driven regression suite gates every release given the clinical sensitivity of the data. Rolled out across multiple care homes with role-based access for carers, nurses, and family members.

2. Apex Lending Intelligence Suite — Digital Lending & Credit Risk Underwriting Platform



Banking & Financial Services

A loan-origination and underwriting platform for a non-bank lender, combining a Python/FastAPI decisioning service with an XGBoost/LightGBM credit-risk ensemble trained on bureau, bank-statement, and alternative-data features. Cassandra backs the high-write transaction and repayment-event store for horizontal scale, with Redis fronting the scoring API for sub-100ms decisions at peak application volume. n8n orchestrates document collection, KYC verification calls, and underwriter notifications across the lender's CRM and e-signature tools.

3. Claim Guard — Insurance Claims Automation & Fraud Detection Suite

Insurance / Financial Services

Automated first-notice-of-loss intake through settlement recommendation for a mid-size insurer. Computer-vision OCR (Tesseract/Google Vision) extracts data from scanned claim forms and repair estimates; an anomaly-detection model flags claims with fraud-risk patterns for manual review. Make (Integromat) and Zapier route flagged claims to adjusters and sync outcomes back to the policy admin system, cutting average claim-processing time meaningfully while preserving a full audit trail for compliance.

4. Answer Lens — Agentic Answer-Evaluation Platform for Competitive Exams

EdTech / GovTech

A LangGraph/LangChain/Gemini-based platform that OCRs handwritten UPSC Models exam answer sheets and runs structured, rubric-based agentic evaluation for a government-exam coaching institute. Each answer is scored against a multi-criteria rubric with model-generated justification, replacing slow manual review with consistent, explainable AI-assisted grading, while a Postgres-backed analytics layer tracks student performance trends over successive mock tests.

5. TalentOps Analytics Suite — Workforce Analytics & Agentic HR Operations Suite

Enterprise / HR-Tech

An internal HR platform for a 3,000-employee enterprise client, unifying attendance, attrition-risk scoring, and skills-gap analytics into Power BI dashboards for leadership. An agentic assistant (LangGraph + internal knowledge base) answers employee policy questions and routes leave/reimbursement requests, with n8n handling onboarding-workflow automation across HRIS, IT provisioning, and payroll systems. MongoDB stores flexible employee-record schemas across business units with differing HR policies.

6. SEO Navigator — Enterprise SEO & Rank Intelligence Platform

MarTech / Digital Marketing

A SaaS ranking-tracker for digital marketing agencies, built on Laravel, PostgreSQL, and Redis, deployed on Dockerized AWS infrastructure. Tracks keyword and competitor-rank movement across thousands of client domains daily, with a Selenium-based scraping layer feeding the ranking engine and a Cypress test suite protecting the client-facing dashboard through weekly release cycles.

7. Call Lens — Contact Center Conversation Intelligence Suite

Customer Success / Call Analytics

An 28-parameter call-scoring framework and enterprise transcription-analysis pipeline for a customer-success organization, processing 7,500+ calls per cycle through Gemini-based transcript scoring covering hook, trust, objection-handling, and tone. Lifted call-survival and conversion benchmarks from roughly 50% toward a 65%+ target through structured, data-driven agent coaching, with results surfaced in weekly Tableau scorecards for team leads.

8. InfoBridge AI — Enterprise Document Intelligence & RAG Assistant

AI Infrastructure / Enterprise Search

A retrieval-augmented assistant giving enterprise employees natural-language access to policy manuals, contracts, and internal wikis. Built on a self-hosted Weaviate cluster (55M+ objects, 39 collections) with RQ-8 quantization for ~4x compression at 85-92% recall, and a Kafka-based CDC pipeline that applies delta updates instead of re-vectorizing on every document change. Memcached fronts frequently-asked-query results to keep median response latency low under concurrent load.



9. ShockFit — Real-Time Voice AI Fitness Coaching Application

Health & Wellness

A React Native fitness app for a UAE-based wellness brand, using the OpenAI Realtime API to deliver live voice coaching during workouts, backed by PostgreSQL on EC2 and built to DFC regulatory requirements for market launch. Playwright and Appium-driven test automation covers the mobile release pipeline across iOS and Android before each App Store submission.

10. Insight Board — BI Modernization & Unified Reporting Platform

Enterprise Data & Analytics

Migrated a legacy BI stack to Apache Superset over an existing MySQL/PostgreSQL warehouse for a mid-market enterprise client, avoiding unnecessary data movement while unifying sales, operations, and finance reporting into one self-serve platform. dbt models standardized metric definitions across departments that had previously maintained conflicting spreadsheets, and scheduled Airflow jobs keep dashboards refreshed nightly.

11. SiteWise Expansion Platform — Agentic Retail Expansion & Site-Selection Assistant

Retail / Operations

A LangGraph + Weaviate + Gemini conversational assistant for a multi-location retail chain's expansion team, answering natural-language questions about candidate sites using footfall, demographic, and competitor-density data. Dynamic, context-aware retrieval cut token usage by 66% versus a naive prompting approach, while Zapier pushes shortlisted sites and supporting analysis directly into the team's existing project-tracking board.

12. Quality Forge Release Guard — Automated Test Engineering & Release Quality Platform

Enterprise / QA Engineering

A centralized test-automation framework built for a client running weekly releases across three product lines, combining Pytest for backend/API contract testing, Playwright and Selenium for cross-browser UI regression, and Locust for pre-release load testing. Integrated into GitHub Actions as a release gate, the suite cut manual regression effort substantially and gave release managers a single pass/fail dashboard before each deployment window.

13. RouteMate — Field Force & Last-Mile Delivery Mobile Platform

Logistics / Field Operations

A cross-platform driver and field-agent app built in React Native with native Kotlin/Swift modules for background GPS tracking, offline-first order sync, and proof-of-delivery capture (photo + e-signature). Live location events stream through Kafka into a dispatch dashboard, Firebase Cloud Messaging drives real-time job assignment push notifications, and an Appium/Playwright regression suite covers both driver and dispatcher apps ahead of each store submission and backend release.