



Production-Grade AI for Business-Critical Operations



Applied AI for Finance, Industry, and High-Trust Environments

A_F Introduction

ArtFin is an AI engineering branch focused on building operational AI systems across finance, industry, and complex enterprise environments.

Founded with a focus on production-grade AI, ArtFin designs and delivers systems that move beyond experimentation into real-world operation, where performance, reliability, and compliance are critical..

We specialize in **[AI Development as a Service - AI DaaS]**, that proved in national financial infrastructure projects like **[GIRO Fraud Detection AI]** (under MNB supervision).

[Languages]: English, Hungarian, Spanish, Russian, Japanese



AI in Reality

- Organizations heavily invest in AI, treating these projects as pilots, isolated analytics or experiments
- In reality AI is not a model, a tool or side project - it is a system engineering level of thinking, creating value only when it operates inside real environments:
 - Existing infrastructure
 - Regulatory constraints
 - Imperfect, real-world data
 - Human decision processes

This requires

AI DaaS

[Architecture]

- System Design
- AI Strategy
- Solution Definition

[Engineering]

- Data, models, platforms
- LLMs, ML, computer vision

[Delivery]

- Deployment
- Integration
- Operationalization



What We Deliver

We engineer **[AI systems]** that **[Operate]** inside real-world environments and **[Integrated]** into:

- transaction flows
- industrial processes
- enterprise workflows

and **[Built]** for:

- low latency
- regulatory constraints
- continuous operation

Financial Systems

- Detect fraud in milliseconds
- Score transaction risk in real time
- Explain every decision to regulators

Industrial Systems

- Predict failures before downtime occurs
- Optimize production in real time

Enterprise AI

- Automate complex document workflows
- Deploy secure, enterprise-grade AI assistants

Field Intelligence

- Inspect assets with computer vision in real time
- Detect anomalies as they happen



A^F Key Competencies

[Real-Time AI Engineering]

- streaming systems (Kafka, Flink)
- sub-second decision pipelines

[High-Performance Platforms]

- low-latency backend systems
- event-driven architecture

[Advanced Intelligence]

- ML + anomaly detection
- graph/network analysis

[Trusted AI]

- explainability (SHAP)
- audit-ready governance

[Enterprise Integration]

- financial messaging (ISO 20022)
- legacy + real-time system integration

[Production Infrastructure]

- Kubernetes, CI/CD, observability
- high-availability, multi-region systems



Technology Stack

[Core platform architecture and backend development] - Java / Kotlin / Go / modern C++; REST + gRPC API planning and implementation; Kafka / Pulsar / RabbitMQ; GC tuning, memory pooling, lock-free structures

[Real time data processing/streaming] - Apache Kafka / Redpanda / Pulsar deep knowledge; Flink / Spark Structured Streaming / Kafka Streams

[Data modelling and storage] - PostgreSQL / Oracle / CockroachDB; NoSQL: Cassandra / Scylla / Dynamo-type store; Redis / Aerospike; ClickHouse / Timescale / Druid

[Graph and network analysis] - Neo4j / TigerGraph / JanusGraph; Python graph stack: NetworkX, PyTorch Geometric, DGL

[Machine learning and online scoring] - fraud / anomaly detection

[Explainability & model governance] - SHAP / LIME / feature attribution; Decision trace logging

[DevOps / SRE / infrastructure] - Kubernetes (prod-grade); Helm / ArgoCD / Terraform



A= Services

[Advisory]

Identify where AI will actually generate ROI — and design systems ready for real-world deployment.

- Best suited for organizations defining their AI strategy

[Embedded]

Add senior AI engineers directly into your team — without the cost and delay of hiring.

- Best suited for organizations accelerating delivery or extending internal capabilities

[End-to-end]

From idea to production — we take full ownership and deliver measurable outcomes in weeks, not months at an estimated cost.

- Best suited for organizations seeking accountable delivery and fast, production-ready results



A= Why ArtFin?

[Scalable AI delivery] - We scale AI initiatives from initial use cases to full production systems. Align team size from 2-3 to up to 5-10 with delivery phase and complexity.

[System-level expertise] - We approach AI as a system engineering challenge, not a modeling task. Design for integration into your operation, align AI with infrastructure, data and workflows.

[Seamless integration] - We operate as part of your organization, not as an external vendor. Embedded within your teams and processes, aligned with your technology stack and governance.

[Proven in high-trust environments]- Experience where system failure is not acceptable.

[Fintech background] - Besides AI, we have an extensive experience from the past in fintech, banking, payments, investment platforms, brokerage firms, and blockchain solutions.



A_F Case Study: Financial System

CEE - National Level Financial Infrastructure

[Task] - Real-Time Risk Intelligence Platform for National Bank

Delivered a multi-layer AI ecosystem processing transactions in real time with sub-second response time.

- High-precision fraud detection with reduced false positives
- Ensemble ML | anomaly detection | network analysis
- Fully explainable decisions with audit traceability
- 24/7 scalable, regulator-ready architecture

[Result]

Significant fraud detection uplift while maintaining instant payment performance.



A= Case Study: Industrial

Large Industrial Printing Manufacturer

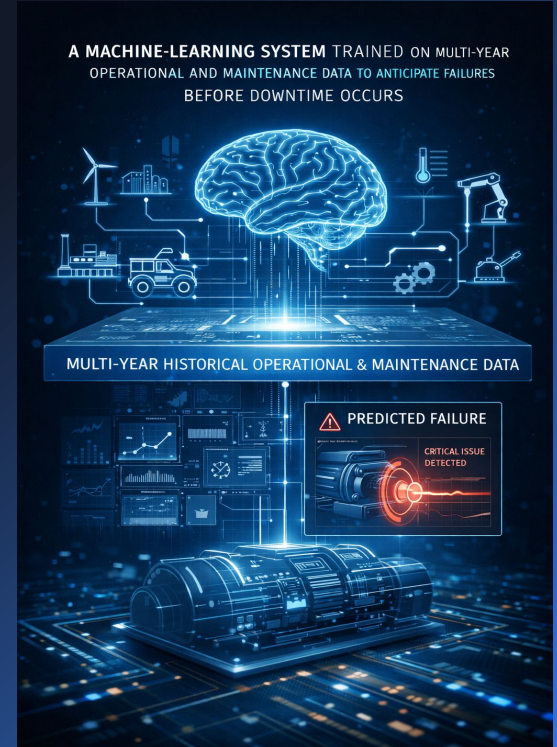
[Task] - Predictive Maintenance & AI Controlling

Built a machine-learning system trained on multi-year operational and maintenance data to anticipate failures before downtime occurs.

- 15,000+ historical maintenance records analyzed
- NLP-based fault classification from unstructured logs
- Time-series failure prediction models
- Interactive diagnostic dashboards

[Result]

Reduced unplanned stoppages. Improved production reliability.



A^F Case Study: Production

[Task] - AI-Driven Production Optimization

Designed modular AI systems across procurement, cutting optimization, machine monitoring, and quality control.

- Computer vision for material optimization
- Predictive maintenance for high-load equipment
- Demand forecasting & inventory optimization
- Smart production scheduling

[Result]

Increased material yield, reduced waste, and optimized production throughput.





Case Studies: AI Intelligence

AI-Powered Enterprise Knowledge Layer

We created an AI-powered knowledge layer for a multinational financial firm, unifying fragmented documentation, spreadsheets, and databases into a structured, machine-readable model. Python, Databricks, Airflow, LLMs, and RAG agents map entities, relationships, and processes across business domains. This enables fast, natural-language impact analysis, reduces dependency on key experts, and lays the foundation for future AI and analytics initiatives.

Agentic AI Platform for Intelligent Customer Self-Service

We developed a multi-agent AI platform for a large financial enterprise to deliver intelligent, context-aware customer support. Each agent specializes in domains like billing, products, and policies, reasoning across systems to provide accurate answers and actionable guidance. Built with Python, LLMs, RAG, and vector databases, the solution reduces support load while enabling scalable AI-driven customer journeys.

AI-Supported Impact Analysis and Documentation Intelligence

For a technology firm in financial services, we built an AI-driven platform to understand how changes affect reports, systems, processes, and documentation. Using Python, Databricks, Spark, and LLM-powered RAG, all internal documentation and databases were unified into a connected knowledge graph. Teams can now ask natural-language questions, perform faster impact analysis, and reduce operational and regulatory risk.



Case Studies: Fintech

A global leader in audit, tax, and advisory – PSD2 Banking Integration

We implemented PSD2-compliant banking integrations, ensuring secure connections between banks and third-party providers. This involved working with PSD2 APIs from multiple European banks to enable seamless account data and financial transactions.

European Wealth Platform – Payments Infrastructure

Built a fully compliant, scalable payment ecosystem for a fast-growing fintech platform. Supports recurring and one-time payments, multi-currency flows, and secure payouts. Designed a standalone gateway with advanced authentication and real-time observability. Engineered for scale, security, and reliability from day one.

European Bank – Digital Asset Platform

Contributed to a regulated Swiss crypto banking platform powering digital asset custody and trading. Developed key components across web, mobile, and backend systems. Operated in a complex, high-security, multi-product environment. Demonstrates deep expertise at the intersection of fintech and blockchain.



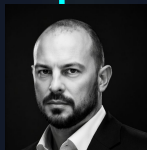
Meet Our Partners



A= Partner With Us!



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[Certifications]

/ ISO 9001:2015 completed & ISO 27001 in progress

/ Certified DevOps engineers in AWS, Kubernetes, and Azure

/ Rated 4.9 out of 5 on Clutch by our partners

Company name: SCALER Software Solutions Kft. | Registration number: 13-09-186956 | TAX ID: HU23597970
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