

# VANTAGE

AI ARCHITECTURE SERVICES



## Introducing Our Outsourced AI Architecture Services

At Vantage, we continually evolve to meet the dynamic needs of modern businesses. Building on 25+ years of IT recruitment excellence, we now offer outsourced AI architecture services that combine technical proficiency with client-centric focus.

From traditional statistical modeling to cutting-edge generative AI, we deliver solutions that adhere to rigorous data privacy standards and financial-industry best practices.

## Our Approach & Financial Services Expertise

Our deep understanding of the financial sector sets us apart. Our team has helped leading institutions—including US Bank, Credit Suisse, and BNP Paribas—modernize legacy processes, optimize cloud infrastructure, and maintain compliance with stringent regulations.

This expertise means we design AI architectures that are both robust and regulation-ready, integrating seamlessly with existing workflows in BFSI (Banking, Financial Services, and Insurance).

# Key Capabilities

## 1. Comprehensive AI & Machine Learning

We adopt a fit-for-purpose approach, choosing the the most effective technique for each project. Our repertoire spans:

- **Classical ML:** Logistic Regression, Support Vector Machines (SVMs), Random Forests, and Gradient-Boosted Trees for straightforward classification, regression, and predictive analytics.
- **Deep Learning:** Neural networks crafted using frameworks like PyTorch to address high-dimensional data and complex problems.
- **Advanced AI:** Integration of the latest breakthroughs in reinforcement learning, generative modeling, and domain-specific optimization.

## 2. Generative AI & LLM Modeling

Whether leveraging state-of-the-art closed source solutions or open-source platforms, we excel at building and refining Large Language Models (LLMs) for diverse applications. Our capabilities include:

- **Domain-Specific Reasoning:** Incorporation of advanced reinforcement learning methods—PPO (Proximal Policy Optimization), DPO (Direct Preference Optimization), and GRPO (Group Reward Policy Optimization)—to shape model behavior and ensure business alignment.
- **Multi-Agent Workflows:** Architectures that enable multiple specialized agents to cooperate on tasks such as summarization, translation, data extraction, and more.

### 3. Audio & Vision Analysis

We design and deploy multimodal AI solutions capable of:

- **Audio Analysis & Transcription:** Automatic speech recognition (ASR) and text-to-speech components that power everything from call center analytics to voice-driven apps.
- **Image & Video Processing:** Object detection, segmentation, and state-of-the-art OCR for extracting actionable insights from unstructured image or video data
- **Conversion of Unstructured to Structured Data:** Turn everything from scanned financial documents to customer images into structured formats that drive downstream business applications and deterministic algorithmic processes.

### 4. Data Privacy & Compliance

At the heart of our solutions is an unwavering commitment to data security. We design and develop privacy-centric architectures aligned with industry standards—vital for regulated domains such as finance and healthcare. From multi-cloud deployments to on-premise solutions, our focus is on maintaining compliance without compromising on innovation.

### 5. Advanced Reasoning Workflows

Our experts implement sophisticated 'reasoning' models that optimize complex, domain-specific processes. By orchestrating multi-agent AI and domain-specific rule engines, we enable:

- **Deep Contextual Analysis for strategic decision-making.**
- **End-to-End Automation of critical workflows**, ensuring consistency, accuracy, and scalability across your organization.



# Why Vantage?

## 1. Tailored AI Solutions

We adapt our toolset—be it classical ML or closed-source generative AI—to match the unique demands of your business challenge.

## 2. Deep BFSI Roots

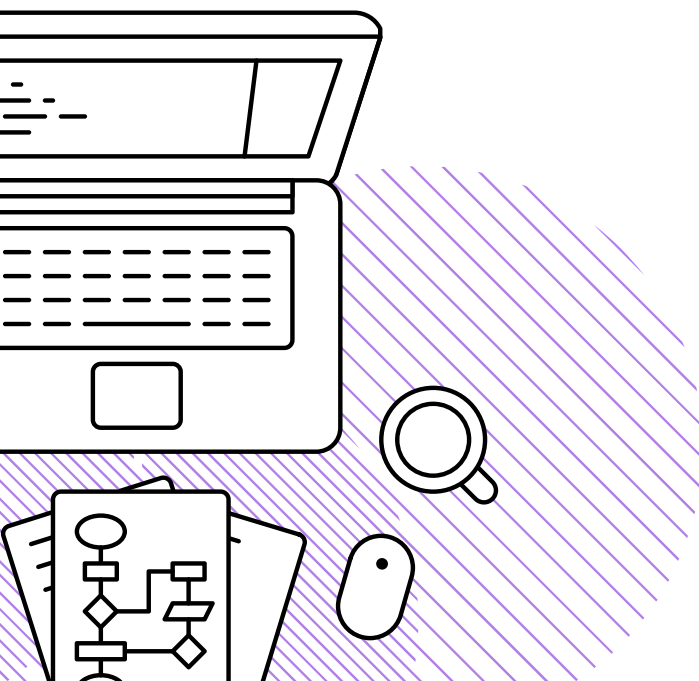
Our extensive experience in hedge fund operations, banking platforms, and merchant services means we bring domain-specific insights right from the start.

## 3. Agile & Transparent Delivery

From initial consultation through deployment and maintenance, our collaborative approach ensures clear communication and measurable outcomes.

## 4. Regulatory & Security Focus

We prioritize data privacy and compliance from day one, embedding best practices into all stages of development.





## Talk to Us Today

Ready to harness state-of-the-art AI for real-world business impact? Whether you're optimizing legacy systems, deploying audio or vision solutions, or driving transformation with the latest generative AI techniques, our team is poised to help.

Contact us for a personalized consultation and discover how we can transform your challenges into opportunities.

**[www.vantage.ie](http://www.vantage.ie)**

**[vantage@vantage.ie](mailto:vantage@vantage.ie)**

**+353 (1) 295 2850**