

## AI AGENT SECURITY FOR FINANCIAL SERVICES

## Your AI Agents Are Executing Transactions. Nobody's Watching What They Do Next.

AI agents in banking, insurance, and wealth management authenticate with valid credentials, clear MFA — and then act. Trade executions, payment approvals, customer data queries. The identity layer said yes. Runtime said nothing.

### Identity Fraud at Scale

A valid OAuth token used by a service account that just queried 400 customer accounts it has never touched. Valid credential. Wrong behavior. No alert.

**45B+ NHIs vs human identities by 2027**

### Activity Fraud in the Transaction Layer

An AI agent approved \$2.4M in transactions in 11 minutes. Daily baseline: \$80K. No SoD gate. No behavioral baseline. No kill switch.

**9 sec compromise-to-impact (PocketOS 2026)**

### Harvest Now, Decrypt Later

Every RSA/ECDSA-encrypted customer record collected today is on a compromise timer. Financial data with 10-year retention requirements is already exposed to quantum adversaries.

**FIPS 203/204/205 — migrate now, not 2030**

| SCENARIO                                  | GAP                                                                          | RUNTIMEAI RESPONSE                               |
|-------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------|
| AI Payment Agent — Anomalous PO Approvals | Behavioral baseline exceeded 30x; no SoD enforcement                         | Agent Finance Rails + Activity Fraud Shield      |
| OAuth Token Theft — Cross-Tenant Queries  | Valid credential; 700 enterprise tenants accessed (Salesforce/Drift pattern) | Identity Fraud Shield + KYA fingerprint baseline |
| PCI Cardholder Data in LLM Context Window | Tokens leak via prompt history, agent memory, model outputs                  | PII Shield + PQ TokenVault FPE at egress         |

## RUNTIMEAI FOR FINANCIAL SERVICES

## Runtime Enforcement — Across Every AI Agent Action

## DISCOVER

## Know Your Agent

## KYA

Every AI agent registered, fingerprinted, org-mapped. Shadow AI foreclosed at DNS before TCP.

## GOVERN

## Identity Fabric

## JIT Entitlements

Ephemeral credentials, JIT access, SoD enforcement, conditional access, proxy tokens that never expose real secrets to agents.

## ENFORCE

## Fraud Shield

## Identity + Activity Fraud

Identity Fraud + Activity Fraud detected inline. Behavioral baseline per agent. Risk score 0-100. Kill Switch <50ms.

## TRANSACTION

## Finance Rails

## Agent Commerce

Agent-initiated payments and procurement within approved guardrails. Human approval gates for high-value transactions. Full audit trail.

## PROTECT

## PQ Data Security

## PQData Platform

PCI cardholder data tokenized with FPE before any model sees it. QuantumVault ML-KEM-1024 encryption. HNDL-proof today.

## AEP — AGENTIC ENABLEMENT PLATFORM

- Know Your Agent (KYA) — cryptographic agent identity, org hierarchy
- Agent Fraud Shield — Identity Fraud + Activity Fraud, real-time 0-100 risk score
- Agent Finance Rails — payment/procurement within policy limits
- JIT Entitlements — no standing privileges, task-scoped access
- Audit Black Box — tamper-proof, cryptographically chained audit trail
- PII Shield — redacts at egress before any model sees plaintext
- Agent Memory Vault — encrypted, tenant-isolated agent context

## PQDATA — POST-QUANTUM SECURITY

- QuantumVault — ML-KEM-1024 key encryption, HNDL-proof secrets
- PQ TokenVault — format-preserving tokenization (FPE) for PCI cardholder data
- PQ Transit Shield — post-quantum mTLS for all inter-service traffic
- PQ Sign — ML-DSA-87 audit log signing — verifiable in 2045
- PQ CryptoGuard — crypto posture scanning, CBOM generation
- PQ Comply — automated PQC compliance reporting

PCI DSS v4

SOC 2 Mappings

DORA

FINRA

SEC Rule 17a-4

NIST AI RMF

ISO 42001

FIPS 203/204/205

RuntimeAI does not pursue third-party certifications. It provides its own compliance documentation to support customer assessments — CISA SSDF self-attestation, SOC 2 Trust-Service-Criteria control mappings (documentation, not a certificate), an independent-style security review, a threat model, architecture documentation, and a current SBOM. For regulated data, on-prem / air-gapped / sovereign deployment is recommended so the customer's own controls and compliance boundary govern the data.

## DIFFERENTIATION

### Policy Without Intercept Is a **Slide Deck**. We Intercept.

| CAPABILITY                                   | CASB/SASE | NHI/PAM | DLP | SIEM | RUNTIMEAI |
|----------------------------------------------|-----------|---------|-----|------|-----------|
| Agent identity model (NHI-native)            | ×         | ~       | ×   | ×    | ✓         |
| Inline fraud scoring before transaction      | ×         | ×       | ×   | ×    | ✓         |
| Separation of Duties for AI agents           | ×         | ×       | ×   | ×    | ✓         |
| Behavioral baseline per agent (LSTM)         | ×         | ×       | ×   | ~    | ✓         |
| Kill Switch <50ms — agent fleet              | ×         | ×       | ×   | ×    | ✓         |
| Post-quantum cryptography (FIPS 203/204/205) | ×         | ×       | ×   | ×    | ✓         |
| PCI FPE tokenization before LLM sees data    | ×         | ×       | ~   | ×    | ✓         |

#### WHY FINANCIAL SERVICES TEAMS CHOOSE RUNTIMEAI

- One Platform Across the Entire AI Agent Stack**  
 Discovery → Identity → Runtime Enforcement → Compliance. Replaces 4–6 fragmented point products. One policy engine, one audit trail, one compliance dashboard.
- Compliance-Ready on Day 3, Not Month 3**  
 SOC 2, PCI DSS v4, DORA, FINRA evidence auto-generated at every agent action. Audit artefacts are produced by the platform, not assembled from logs.
- Enforcement at Machine Speed**  
 <50ms kill switch. <5ms policy evaluation. Fraud scoring inline before the transaction completes. Not a dashboard — an enforcement layer.

### Start a 30-Day Pilot

RuntimeAI deploys as a control plane overlay. Day 1 deployment. Compliance-ready by Day 3.

**Roshan Shaik**

CEO & Co-founder · RuntimeAI

[roshan@runtimeai.io](mailto:roshan@runtimeai.io)

[www.runtimeai.io](http://www.runtimeai.io)

[calendly.com/roshan-runtimeai/30min](https://calendly.com/roshan-runtimeai/30min)