

MARK STAROBINSKY, MBB, CSSBB

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[LinkedIn Profile](#)

CTO | Chief AI Officer | AI Compliance & Trust Architect | Founder – Ontology-Enhanced AI

AI Invention to Enterprise Pilot | Strategic IP Licensing | Generative AI Reliability

Pioneering AI Governance, Trust, and Compliance at the Infrastructure Layer

Visionary AI executive and inventor behind *Ontology-Enhanced AI* — a fully built, patent-filed enterprise system that overlays LLMs with symbolic reasoning, compliance scoring, federated learning, and trust arbitration. Recently led the full-cycle invention, architecture, and enterprise pilot deployment of an Ontology-Enhanced AI system designed to overlay Large Language Models with symbolic reasoning, compliance scoring, and semantic trust layers.

Deep expertise in AI-driven metadata governance, semantics (RDF/OWL/TTL), Neo4j graph databases, and federated model alignment.

Track record of \$1B+ in AI-powered savings through metadata automation, risk reduction, and large-scale AI transformation across Fortune 500 firms.

Recognized by *Marquis Who's Who* as a thought leader in data and artificial intelligence innovation. Formerly Head of Metadata and Data Catalogs at Accenture Technology for North America. Passionate about building scalable, explainable, and compliant AI platforms].

KEY STRENGTHS

- Ontology-Based AI Reasoning & Compliance Frameworks
 - Generative AI Optimization | LLM Fine-Tuning | Trust & Drift Detection
 - Enterprise AI Governance, Risk & Ethics (GDPR, SEC, CCPA, EU AI Act)
 - AI Patent Strategy | Prototype-to-Pilot Deployment | Strategic IP Licensing
 - Multi-Agent Trust Arbitration | Symbolic Traces | SSEOR Compliance Engine
 - Redis + FAISS + Neo4j Integration | Federated Weight Updates
 - Enterprise Metadata Architecture | Real-Time Inference Optimization
 - Technical Due Diligence | AI SaaS Pilots | Investor-Ready IP Packaging
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RECENT INVENTION LEADERSHIP

Inventor & Founder — *Ontology-Enhanced AI Platform (2024–Present)*

Filed: Full Utility Patent | Status: Enterprise Pilot Deployed

- Invented a symbolic + probabilistic compliance architecture for LLMs
 - Implemented dynamic Faiss indexing of 1M + ontology concepts across 1.5M+ relationships
 - Developed core modules for ontology ingestion, enrichment (including RDF/OWL/TTL parsing), embedding (via SentenceTransformer), and FAISS-powered retrieval.
 - Built a regulation-aware risk scoring engine aligning output against 10+ compliance frameworks using scenario-based logic and federated learning feedback.
 - Developed redis-backed scenario engine, multi-agent trust scoring, and feedback optimizer
 - Integrated adaptive drift detection, federated averaging, and real-time regulation checks
 - Created fully working Streamlit demo and API server with full backend orchestration
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EXECUTIVE EXPERIENCE

Smurfit WestRock

Data Strategist – Metadata & Data Catalog SME (Feb 2024 – Present)

- Led S/4HANA metadata optimization via AI ontologies; improved analytics output by 60%
- Integrated AI governance into enterprise data catalog; enhanced regulatory traceability
- Corporate speaker on metadata-driven AI architectures

Accenture Technology – Data & AI Group

Global AI & Metadata Lead | Partner-Level Scope (2018–2024)

- Delivered \$1B+ in savings through AI metadata frameworks, risk compliance, and predictive modeling
- Led global alliances with Alation, IBM, and MarkLogic; defined global data governance models
- Oversaw cloud cost optimization strategies for top U.S. banks and healthcare firms

JP Morgan Chase – CCB Commercial Credit Risk

Executive Director, AI Governance & Digital Risk Transformation (2015–2018)

- Created AI-driven credit models; reduced institutional risk by \$2B

- Designed automated data validation frameworks for BCBS/CCAR compliance
 - Reduced regulatory processing time by 35% using AI compliance triggers
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BOARD & STRATEGIC INFLUENCE

Non-Executive Director | Board Advisor

- Advisory roles across AI governance, monetization strategy, and compliance oversight
 - Advisor to Generative AI startups on model reliability, ontology grounding, and patent strategy
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TECH STACK EXPERTISE

AI/ML & Ontology Tools: LLaMA 2, PyTorch, Sentence Transformers, TensorFlow, Neo4j, FAISS, Redis, HuggingFace, Scikit-Learn, Transformers

Governance Platforms: Alation, Collibra, Informatica, IBM Data Governance

Analytics & DevOps: Streamlit, FastAPI, PowerBI, Tableau, Qlik, GitHub Actions, Docker

Cloud & Infra: Google Cloud, AWS, Azure, Databricks, Palantir

CERTIFICATIONS & EDUCATION

- **MIT Data Architecture** (Professional Certification)
 - **Six Sigma Master Black Belt (MBB)** – Cornerstone
 - **Google Cloud Architect (Professional)**
 - **Generative AI for Business Leaders** – Google | Databricks
 - **BSBA – Finance**, Thomas Edison State University
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THOUGHT LEADERSHIP

- **TEDx (Upcoming):** The Missing Trust Layer in Generative AI
- **[Featured in Marquis Who's Who – 2025 Executive Edition](#)**
- **Speaker:** Enterprise AI Governance, Metadata Futures, AI Licensing Strategy
- **Website:** OntoGuard.ai — Public white papers, pilot demo, IP summary