



UMBRELLA 7, LLC

Applied Machine Learning Research

ABOUT US

Umbrella 7 is an applied machine learning research firm specializing in **ML-driven business optimization** and **internal AI transformation**. With over a decade of experience in machine learning and full-stack development, we help enterprises capitalize on the latest advancements in AI technology. Our early adoption of large language models for quantitative trading applications positions us uniquely to guide organizations through their AI transformation journey. All engagements are conducted through word-of-mouth referrals.

FOUNDER

Brandon Flannery

Brandon began his career at **Pluribus Labs**, which was acquired by Golden Gate Capital in 2017 to form an internal hedge fund. He developed an institutional asset management platform that was subsequently sold to Exos Financial in 2022. Brandon also founded **MB Computing**, creating and operating eight data centers across the United States and Canada. These facilities featured grid-connected operations alongside gas-to-power systems with complete off-grid functionality. This combination of quantitative finance, ML engineering, and physical infrastructure expertise enables Umbrella 7 to deliver end-to-end solutions that bridge technical implementation with measurable business outcomes.

CLIENT ENGAGEMENTS

Exos Financial LLC

Quantitative research and development of systematic trading strategies. Building ML-driven models for institutional asset management and alpha generation.

Bridge Energy

Deployment of modular onsite data centers for grid energy sales optimization. Development of models for oil field economics and operational efficiency.

DUAL North America

Creation of an underwriting automation tool to streamline risk assessment. Optimization of the underwriting and modeling platform for peak economic efficiency.

HUB International

Platform development for insurance initiative optimization including policy client placement, carrier placement, carrier initiatives, and cross-selling workflows.

Nova Network Inc.

Optimization of job posting platform and creation of a real-time messaging system for production teams with WebSocket-based communication.

CORE CAPABILITIES

Full-Stack Development across web, mobile, and desktop platforms (iOS, Android, Windows, Linux) with production-grade architecture and deployment pipelines. **Machine Learning & Predictive Analytics** for risk modeling, demand forecasting, and decision automation that drive measurable efficiency gains. **LLM Integration & AI Transformation** leveraging large language models for document processing, workflow automation, and intelligent system design. **Quantitative Modeling** for systematic trading strategies, pricing optimization, and market research indices built on rigorous statistical foundations. **Data Platform Engineering** including real-time messaging systems, distributed inference clusters, and high-throughput ingestion pipelines. **Process Automation & Optimization** transforming manual workflows into scalable, automated systems that reduce costs and accelerate operations.