

APPLIED AI AND MACHINE LEARNING AT ENTERPRISE SCALE



Your strongest AI/ML ally. *From Silicon Valley roots to global impact.*



Echelon Data Labs (EDL) is a San Francisco-based AI firm that **turns complex data into tangible business value**. Our team is led by business executives and Ph.D.-level engineers and scientists from Fortune 50 companies who have built, scaled, and deployed AI systems for **OpenAI, Twitter, Netflix, Apple, Spotify, and leading marketing firms**. As alumni of Caltech, MIT, and other top programs in computer science, mathematics, and engineering, we combine academic depth with real-world **product rigor** and **business use cases**.

MEASURABLE IMPACT

At Echelon Data Labs, we only work on projects where **AI/ML is the key to unlocking great value**. We build the essential technology components that multiply the power of our clients' businesses.

CORE COMPETENCIES

AI/ML WITHIN SNOWFLAKE'S AI DATA CLOUD

Design and implement high-impact AI/ML use cases, leveraging Snowflake's platform to deliver rapid, outsized business value.

AI-DRIVEN PERSONALIZATION

Recommendation & ranking engines powering billions of daily decisions.

ML MODEL IMPLEMENTATION

Expertise in large-scale ML model implementation with success measured in revenue, efficiency and business outcomes.

CHURN PREDICTION & PREVENTION

Advanced survival and uplift modeling to retain high-value customers.

MARKETING & GROWTH DATA SCIENCE

Causal inference and ML experimentation pipelines to optimize marketing and growth.

AGENTIC AI & WORKFLOW AUTOMATION

LLM-based agents that plan, call tools/APIs, and coordinate humans to complete end-to-end business tasks with safety, observability, and measurable ROI.



REPRESENTATIVE USE CASES

- **Personalization ML** - Build ML models and general architecture to personalize user engagement and maximize revenue and MAU.
- **Dynamic Content Discovery** - Large-scale dynamic content discovery architecture, reducing dwell time to first play by 26%.
- **Churn Reduction** - Develop and implement models to deliver real-time churn scores that, in turn, lowered attrition by 9% in pilot cohort.
- **Contract Archive Analysis and Data Extraction Agents** - Large-scale natural language processing and content extraction of hundreds of thousands of oil and gas leases.
- **Search Page Ad Recommendation** - Recommendation system to maximize revenue and user engagement on a high-volume, well-known search engine landing page.
- **Social Media Budget Optimization** - Forecasting model to optimize budgets and acquisition costs for subject-matter targeted traffic across all major social media sites.

CUSTOMER SAMPLES

The below provides select examples of representative client work. Engagements were delivered by **Echelon** and by the same core team under a prior ownership structure.

FINANCIAL SERVICES:  **experian**  **CBRE**  **PGIM**

- **Experian** - Largest US credit bureau by revenue. Their US Consumer Business offers financial products and acts as a marketplace generating annual revenue of \$1.3B. Echelon is contracted with them to achieve personalization at scale
- **CBRE** - AI/ML prediction model and integrated software, centered around tenant retention, covering over 160,000 tenants.
- **PGIM** (Prudential) - AI/ML prediction model and integrated software, centered around predicting commercial real estate prices from demographic, economic, and alternative data sources.

CONSUMER GOODS:  **Nature's Way**  **eagle foods**

- **Nature's Way** - AI/ML natural language information extraction model and integrated software, centered around a database of 500,000 competitive products in the vitamin/wellness space, including a knowledge base of ingredients and claims to analyze incumbent products by price and volume across distribution channels.
- **Eagle Foods** - GenAI digital platform for marketing personas, centered around large language models and customer context data/historical information to suggest the best marketing copy for each segment.



ADDITIONAL PROJECTS (PRIVILEGED):

- **Financial Industry Client** - Automated title processing for oil and gas companies.
- **Media Industry Client** - Traffic acquisition optimization for vertical content media properties.
- **Consumer Web Platform (European Public Company)** - Landing page ad optimization.

ENGAGEMENT PHILOSOPHY

We can be **prescriptive**—owning architecture and delivery end-to-end—or collaborative, embedding alongside your team to accelerate existing roadmaps. Every engagement starts with a rapid discovery sprint to quantify ROI and align on success metrics.

WHY EDL?

DIFFERENTIATOR	WHAT IT MEANS FOR YOU
TIER-1 TALENT	<ul style="list-style-type: none"> • Silicon-Valley veterans with peer-reviewed research and scaled production wins.
DOMAIN-SPECIFIC KNOWLEDGE	<ul style="list-style-type: none"> • Work with business and engineering experts that understand your industry and your business and have the expertise to build AI-ML applications that far outperform competitors.
IP-FRIENDLY	<ul style="list-style-type: none"> • Client retains IP.

WAYS TO ENGAGE



Advisory Sprints (4-6 weeks)

Architecture review, roadmap, and quick-win prototypes.



Co-Development (3-6 months)

Mixed EDL/client squad building and shipping production features.



End-to-End Solutions (6-12 months)

EDL owns full lifecycle from data ingestion through ML Ops.



Echelon Data Labs

LEADERSHIP TEAM



Sam Hocking
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13 years founding, scaling, and exiting AI firms; his first company AltX (exited to Addepar) was named one of the Financial Times' most innovative companies. He also founded Vertis.ai (AI for workplace and workforce) and SMH Analytics (AI consulting). Former Managing Director at Bank of America (Global Prime Brokerage) and Banque Nationale Paris (Prime Financing, Global Equities). Holds patents in behavioral matching. Advisor to Northwestern-Kellogg and Rollins College.



Manuel Arora, PhD
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10+ years of experience in AI, Machine Learning, and Personalization. Engineering leadership at OpenAI, Twitter, Netflix, Apple and others. PhD in Mathematics (Algorithm Design). Research scientist at Caltech and Max Planck Institute. Research focus: recommender systems, ranking algorithms, LLMs, agentic systems. Award-winning scholar with publications in Mathematics and Computer Science.



Brendan Farrell, PhD
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Founder and majority owner of Clockwork Micro and National Flood Data. Former Chief Data Officer and lead data architect of SnapNHD, acquired by NYSE: ICE. PostDoc at Caltech in Computational Mathematics, PhD in Applied Mathematics at UC Davis. 10+ research publications, primarily in high-dimensional probability. Expertise in natural language processing.



Nathan Janos
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Career as Principal Data Scientist at multiple AdTech companies, including one that reached IPO. Principal Data Scientist at Measured, focused on marketing science, mathematical modeling, and analytics. Former Chief Data Officer at System1, leading experimentation automation and large-scale data architecture. Expertise in statistical modeling, causal inference, and practical ML deployment. B.S. in Computer Science at MIT.



To schedule a complimentary custom demo, give us a call today.

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