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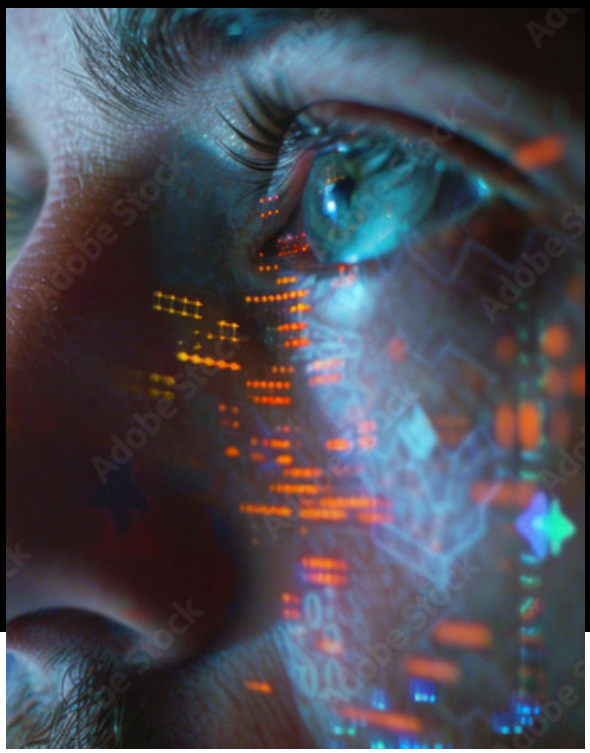

Virtual Anticipation Network (VANE)

Empowering Decisions Through Predictive Clarity

CURRENT PROBLEM

In complex operational environments, organizations face challenges due to gaps and errors in data, making it difficult to discern true signals from misleading information. These issues hinder effective decision-making as intersecting effects and hidden relationships complicate understanding and forecasting potential outcomes.

OUR SOLUTION

VANE provides clarity in complex environments through automated machine learning, tensor completion, and scenario forecasting, enabling accurate interpretation of data, optimizing decision-making, and improving situational awareness.

VANE was designed and developed as an auto-ML forecasting and “what-if” impact analysis platform targeted at decision optimization. It uses robust machine learning techniques to accurately interpret “dirty data” through fusion of sources from multiple topic domains to improve forecast accuracy and create whole-of-environment models in support of automated scenario assessment.

VANE’s automation increases the agility of leaders seeking the likely impacts of decisions, tracks the progress towards future goals, and tips analysts on relationships in sensor data correlated with those outcomes.

How It Works

Tensor completion, originally developed for quantum mechanics, enables advanced automation by learning relationships across multiple dimensions. This approach aggregates and analyzes signals from sparse data, filling gaps left by traditional methods. Through machine learning, it independently predicts outcomes and enhances downstream modeling, becoming more accurate as additional data improves its confidence.

3,000,000,000

Data points processed using a serverless, distributed architecture.

27,000

Models trained monthly to provide near real- time insights.

Top Use Cases

Situational Awareness	Time Series Forecasting	Data-Driven Decision Making

Key Differentiating Capabilities

Automated-Machine Learning

To discover behaviors and relationships hidden in data without waiting for subject matter experts.

Tensor Completion

To deal with dirty data and multi- domain interactions.

Scenario Forecasting

To see future impacts, generate courses of action, and optimize plans.

STAY CONNECTED

BigBear.ai info@bigbear.ai

Contact Us Here