



PerixAnalytic

ADVANCED PROGRAMS IN

**FINANCE • ECONOMICS • DATA • AI •
DECISION-MAKING**

Where Questions Cross Disciplines:

PerixAnalytic explores questions that cross disciplinary boundaries. The objective is not simply to acquire another technique. It is to understand why the technique exists, what it can reveal, where its assumptions begin to matter, and where its explanatory power ends.



Course 09

WHEN MACHINES FIND THE PATTERN

Artificial Intelligence, Machine Learning & the Problem of Understanding

Artificial intelligence introduces new ways of finding structure within information. But finding a pattern is not the same as understanding the system that generated it. A predictive model may perform exceptionally well while leaving the underlying mechanism uncertain. This course examines the boundary between machine prediction and human interpretation.

Perspectives

- Artificial Intelligence
- Machine Learning
- Data Science
- Pattern Recognition
- Computation
- Interpretability
- Uncertainty

AI Laboratory

Participants examine the complete analytical cycle:

Data → Feature → Pattern → Model → Prediction → Validation → Interpretation

The focus is on model evaluation, overfitting, supervised and unsupervised learning, interpretability, and the distinction between predictive accuracy and explanatory understanding.



Central Question

When a machine finds a pattern, do we understand what it has found?



Format: AI & Analytics Course

Level: Intermediate / Advanced

Audience: Analysts, researchers, finance professionals, economists, technology professionals