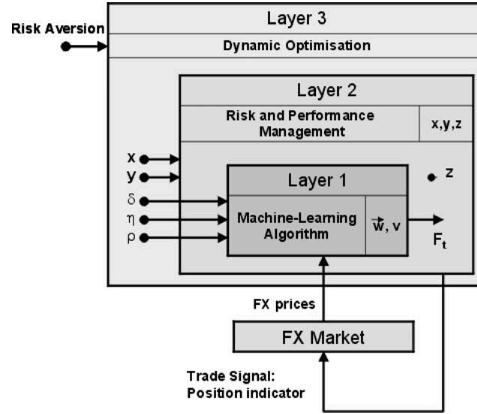


- ▶ **The automated trading system** consisting of three main layers:

- 1). the machine-learning algorithm
- 2). the risk and performance management layer
- 3). the dynamic optimization layer



How to Backtest an AI-driven Strategy

An AI-based trading strategy that leverages machine learning to generate trading signals, select size positions, or optimize the overall performance. It involves the following steps, with a specific investment universe and horizon in mind:

- ▶ Source and prepare market, fundamental, and alternative data
- ▶ Engineer predictive alpha factors and features
- ▶ Design, tune, and evaluate ML models to generate trading signals
- ▶ Decide on trades based on these signals, for example, by applying rules
- ▶ Size individual positions in the portfolio context
- ▶ Simulate the resulting trades triggered using historical market data
- ▶ Evaluate how the resulting positions would have performed