



BUILD EFFECTIVE AI-DRIVEN FRAUD ANALYTICS SYSTEMS

Fraud impacts everyone, from individual consumers to large corporations. With constant changes in fraud tactics and large volumes of data, fraud detection is an ever-evolving battle. Detecting, preventing, and fighting fraud requires adaptable technology that easily adjusts to new attacks. Without tools that segment data, remove biases, and generate business rules, fraud can go undetected for too long.

Upgrade Fraud Detection Workflows with Comprehensive Data Preparation and AI

The [Altair® RapidMiner® platform](#) modernizes and automates data extraction and transformation, enhances fraud detection techniques, and reduces losses caused by fraud. By assisting in more efficient and accurate decision-making, Altair's [data preparation](#) solutions save valuable time when new fraud attacks arise. Predictive and prescriptive models built using Altair's [machine learning](#) and [artificial intelligence \(AI\)](#) software helps organizations stay ahead of fraudsters and decreases costs.

Leverage the Power of Decision Trees and Strategy Trees

Altair's patented decision trees enable analysts to segment, profile, identify, and rank relationships between variables and support the creation of complex models — without needing to write any code. Their data visualization capabilities allow tree structure comparisons and identification of significant variable relationships. Additionally, users can export Altair decision trees to Python, R, and SAS.

Altair's strategy trees are transparent, explainable, and provide users with insight drawing on thousands of data dimensions. This eliminates the need to create multiple models; instead, users can analyze unlimited numbers of business rules with the software's data visualization capabilities.

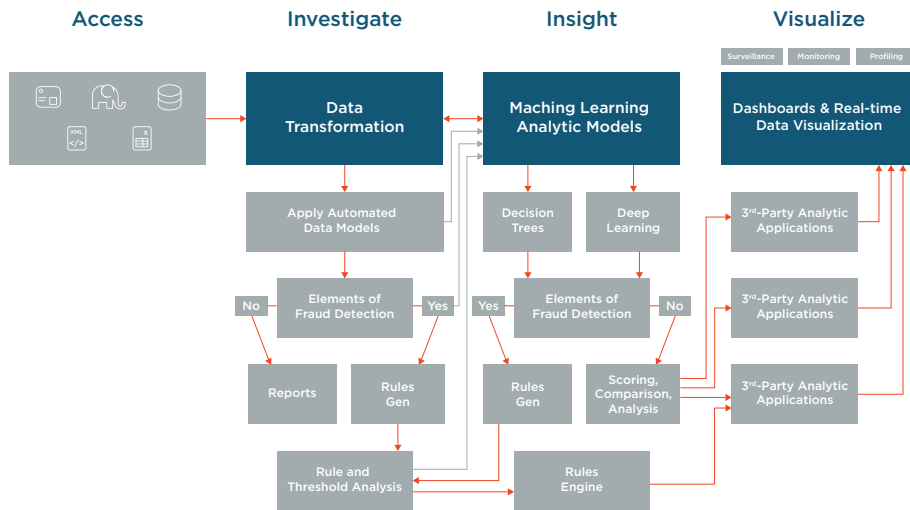
Use Knowledge Graphs to Organize All Relevant Data

With fraud investigation, it's important to quickly understand and organize data. The Altair RapidMiner platform includes [Altair® Graph Studio™](#) and [Altair® Graph Lakehouse™](#), a massively parallel processing (MPP), scalable, in-memory graph database combined with a data warehouse. [Knowledge graphs](#) add real-world meaning to structured and unstructured data to reveal insights and connections. They facilitate fast data discovery and integration and allow users to make sense of very large, disparate data sets.



Altair's data analytics, AI, machine learning, and knowledge graph technology provides enterprises with a powerful toolkit for detecting and analyzing fraud. These technologies provide enhanced accuracy, efficiency, and scalability, enabling organizations to stay ahead of increasingly sophisticated fraud tactics.

Sam Mahalingam, CTO, Altair



Altair supports the complete data analytics workflow, including data preparation solutions that enable connections between disparate data sources and formats, advanced machine learning and AI to help make better decisions, and visual analytics tools that provide transparency in high data volume/velocity environments.

Use AI to Analyze Fraudulent Behaviors and Identify Patterns

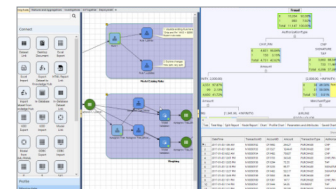
The Altair RapidMiner platform supports a complete data analytics workflow, from advanced to visual analytics tools. Automate data extractions and transformations from multiple data formats to apply fraud detection algorithms built using [Altair® AI Studio](#), [Altair® AI Cloud](#), or [Altair® Knowledge Studio®](#).

Altair's deep learning and neural networks detect fraudulent patterns in large amounts of data faster than other technologies. Altair's data profiling capabilities also help businesses understand data to locate usable variables and flag outliers to analyze suspicious behaviors. Altair's [data visualization](#) and business intelligence (BI) tools enable data science teams to build appealing, easy-to-comprehend dashboards and make them available throughout the organization.

Fraud Analytics Use Cases

The Altair RapidMiner platform offers many solutions to detect and prevent fraudulent activity in changing environments, including the ability to:

- Detect schemes like double payments, repeat claim submissions, premium and asset diversion, fee churning, and other types of fraud.
- Protect insurance and government benefit claims, retail returns, credit card purchases, under and misreporting of tax information, and mortgage and consumer loan applications.
- Analyze data to find patterns that detect bribery and similar improper relationships.
- Segment, profile, and explore groups of customers, transaction types, transaction amounts, third party data, and other data sources to identify fraudulent activities.
- Interact with point of sales solutions and transaction applications, monitoring credit or debit purchases, applications for lines of credit, and other similar activities.
- Maintain a bird's eye view of all securities trading activity throughout the trading day by trader, instrument, asset class, office, desk, and any other dimension of interest.
- Monitor trading activity in real time to spot potentially fraudulent trading activity.
- Identify cases of potential spoofing, quote stuffing, wash trading, and other fraudulent activity.
- Investigate trader interaction networks to speed understanding of past activity and identify behavioral abnormalities.



The Altair RapidMiner platform enables business users at all levels to collaborate on insightful, trusted, and accurate data when analyzing fraud. Extract, transform, model, and visualize payment patterns, merchant data, and other financial information to detect fraudulent transactions.