

FUND MANAGEMENT Finding signal in a volatile market

The Mind Foundry Platform gives you the most accurate time-series forecasting available to speed up signal discovery so you can build profitable trading strategies even in uncertain times.

What if you could expedite creation of your portfolio strategy while managing risk and accounting for market volatility?

With market conditions changing by the day, finding signal in single-instrument data is a challenging and time-consuming task.

Quantitative analysis has long sought to address this obstacle using advanced mathematical techniques. Unfortunately these strategies depend excessively on pattern recognition and linear combinations of features. This means they are not only susceptible to backtest overfitting, but also struggle to control properly for the political, structural, and behavioral idiosyncrasies prevalent in markets today.

Now, imagine if you could accomplish a strong machine learning quantitative approach without excessive training in data science and non linear modelling.

This is where Mind Foundry can help.



EXECUTIVE SUMMARY



Discover and intelligently refine signals from prices, returns and alternative data with our best-in-class Time Series Forecasting.



Embed these signals to build profitable trading strategies.



Harness inbuilt decades of machine learning experience to avoid overfitting and allow fundamental traders to unlock the power of quantitative strategies.



PRODUCT SNAPSHOT

Mind Foundry Horizon

Horizon has been specifically designed for finance. It's the first product of its kind, making quantitative methods accessible to any trader, no matter their background or training.

Horizon's pre-configured data pipeline modules and auto-reporting make it the ideal solution for forecasting and signal discovery in trading and investment strategy.

An intuitive pipeline for every challenge

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Horizon's pipelines simplify how you interact with powerful machine learning algorithms.



Retain intuitive yet granular control of data management, modelling and backtesting at every step. Optimize what matters to you.



Surface transparent insights through statistical and empirical approaches to understand latent structure in your data, complete with measures of uncertainty.



Pipelines scale dynamically to work with your data and latency requirements. Where elasticity is not enough, we'll work with you to build bespoke solutions.



IMAGE: One of Horizon's many prebuilt pipelines ready for you to use.





MACHINE LEARNING FOR TRADING

Enhance your investment process with a quantitative overlay

The potential uses for machine learning in quantitative finance are great, but the workflows needed to support them can be complicated and take years to learn. Horizon's custom UI was designed specifically to simplify these workflows in one place so you can forecast price movements, cap your downside, and hedge against risk without needing a PhD.

Learn to think a quant, without all the maths. Keep your current investment strategy, be it fundamental or something else, while adding an Al layer on top that lets you take it further.

Decades of innovation have been brought together in the Mind Foundry Platform to make this possible. Powered by the Furnace, a constantly evolving Meta Learning Engine, The Furnace instills Horizon with the intelligence to not only adapt as markets change - but get better. It does this through Bayesian inference, letting you see and understand how each change affects the next. As volatile markets create unforseen outcomes, Horizon keeps you in the loop with predictive and analytical uncertainties every step of the way. No black box.

Exposing intermediate results and uncertainty rather than focusing only on predictions also means that you can build a model accounting for interdependencies and volatilities in your stock universe. You can then augment Horizon's predictions with this information to suit your risk profile. Finally, take advantage of the built-in trading simulator to demo and test your new new strategies before launching them for real.

Horizon's intuitive UI means that any trader can unlock these types of quantitative insights from their data, instantly.

CASE STUDY: A three-asset portfolio analysis in volatile times.

Mind Foundry for portfolio analysis and construction.

Customers use Mind Foundry Horizon to build profitable strategies in a range of asset classes. Here, a customer successfully predicted the weekly prices of three diverse assets: coffee, gold, and natural gas and used this in a profitable trading strategy with a promising risk profile.

We found that Horizon could generate a successful predictive model for weekly Gold prices 1 week in advance. The predictive errors were acceptable for a week-ahead forecast, and the discovered signals used for the prediction were reasonable from factor-based, signal-based, and model-based perspectives.

A further conclusion was that the Open Interest is a particularly strong driver of gold prices - it stands out as a pertinent signal in the unbiased factor-based analysis, and is a primary influencer for the model-centric predictive algorithm.





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INVESTMENT AND TRADING

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BRING AI TO YOUR BUSINESS WITH THE

MIND FOUNDRY PLATFORM

The Mind Foundry Platform does much more than build the best models. It creates trusted collaborations between people and AI so that each can accomplish more than they could on their own.

The Furnace



Leverage the awesome power of Machine Learning, decades in the making.

The Furnace is at the heart of the Mind Foundry platform and is based on decades of innovation. A powerful Meta-Learning Engine, the Furnace powers a suite of applications that can transform your business.



Horizon

Predict the future with the world's most powerful time-series forecasting AI.

Time-series forecasting is one of the most challenging Machine Learning applications to get right, and we do it better than anyone else.

Designed specifically to meet the demands of complex markets and systems. Horizon's modeling and forecasting tools help you take any investment or risk strategy to a new level.



Analyze

Automate solutions to real-world problems with Collaborative AI.

Analyze's self-serve machine learning platform lets you see and understand your data through the lens of Machine Learning.

Built to automate the most challenging Machine Learning problems in a way that empowers people and machines to do more than either could accomplish on their own.



Launchpad

Make the power of Machine Learning available to people throughout your organization.

Create powerful AI-based solutions and share them with your team as problem-solving apps.

Launchpad lets you rapidly develop and deploy ML apps with a simple user interface.



INVESTMENT AND TRADING





ABOUT US

Mind Foundry is an Oxford University spinout, founded by Professors Stephen Roberts and Michael Osborne, pioneers in the field of Al and Machine Learning.

With a deep understanding of how important these technologies are to our future, the mission of Mind Foundry is to enable Humans and AI to work together to solve the world's most important problems.

Mind Foundry has developed technology and products that help people bring machine learning closer to their work. Our platform is a new type of Machine Learning that is powerful enough to be trusted by experts and easy enough to be used by people throughout your organization.

Built upon a foundation of scientific principle, organisations use Mind Foundry to empower their teams in entirely new ways.

CREATING A FUTURE WHERE AI AND HUMANS WORK TOGETHER TO SOLVE THE WORLD'S MOST IMPORTANT PROBLEMS



