



# AI For The “Imperceptible”

## Enabling AI-driven information dominance at scale

**A time-series AI platform to exploit multiple, heterogeneous military sensor data sources with large number of signals to provide situational awareness**

Falconry has successfully demonstrated critical insights at scale against trillions of high-speed data points from U.S DoD's field systems. It can analyse large data sets from diverse sources rapidly to reveal actionable intelligence in real-time and to create domain awareness. Falconry AI easily works in your environment, whether that's cloud, data center, edge, low-side or high-side - even on the assets themselves.



### Pattern-Of-Life Detection

Detect and classify objects in a geographical area of interest; **analyse movement of vessels, aircrafts** and provide insights on last location + predicted locations



### Network-Of-Network Smart Mapping

Monitor complex networks including computer networks for **cyber security threats like zero-day vulnerabilities**, Satellite network, intentional disruption of signal network, analysing patterns



### Performance Health Monitoring

Turnkey solution discovers timely and reliable **precursors to equipment failures**. Greater equipment sustainability & explanation scores to find root-cause.



### Critical Infrastructure Assessment

AI-enabled data driven modeling of asset that **predicts abnormalities** affecting critical infrastructure such as power grid, and in turn ground operations/missions.



*“The AF DCGS program is eager to bring Falconry’s operational AI technology into the weapon system to provide actionable insights into our critical mission data. We look forward to enhancing our mission effectiveness by leveraging their system.”*



**Scott Mangrum, C2ISR Division Chief Engineer  
United States Air Force**

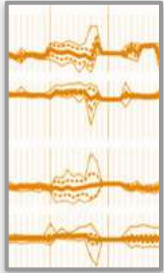


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## Falconry Time Series AI Platform For Smart Defense Operations

Multi-source  
Operational  
Data



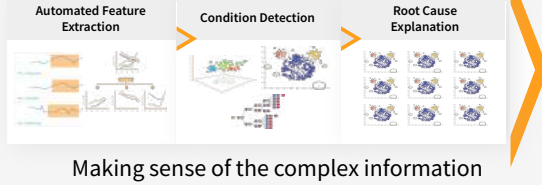
Terabytes of time series data

Automated Time Series AI

Analyst Interfaces

**Augmenting  
Domain Awareness**

- Pattern-of-Life Detection
- Performance Health Monitoring (PHM)
- EW Data Analysis
- Cyber Infra Monitoring
- GeoINT/MASINT/ELINT
- Platform Digital Fingerprinting



Detect patterns, provide root cause analysis via diagnosis tools



### Automated anomaly detection

- ✓ Continuously monitor all signals from diverse sensors to focus attention to imperceptible anomalies



### Analytical indexing

- ✓ Care about temporal behavior of the whole asset rather than individual data values



### Unsupervised learning

- ✓ Spin through vast data volumes to address incidents and risks/threats without requiring massive training or setup time

Capability	Scale	User
Portable AI	High-frequency low-latency	Fusion Analyst
Guided AI for identified patterns	Targeted Patterns	System Engineer
Automated unsupervised AI	Contextualized data	Operations Officer
Automated unsupervised AI	All data	Developmental Engineer

## FALKONRY “platform-in-a-box”



### Real-time Inferencing

Faster inferencing speeds at plant scale in real-time. Ability to support upto **1,000,000 sensors** and process 1 year worth of data in **less than 60 minutes**.



### Scaling Collaboration

**Built for operational users** with intuitive interfaces to capture expert knowledge at asset, line and process levels. Improve system comprehension, yield, reliability and quality.



### Deployment Flexibility

Easy-to-deploy AI software leveraging unprecedented compute density. Analyze real-time data streams closer to the data source **at the edge, cloud or on-premise**.



### Easy API Integration

Hosting a complete set of **REST APIs** that make it **easy data integration** into wide range of external IT systems. The API work with both, the Falconry server and at the edge.