The shifting sands of maintenance surprises

Any competitive production and manufacturing environment is always evolving - to improve productivity and quality even in the face of changing demand. These changes mean new, abnormal conditions are arising somewhere in that plant at any given time. How are we to balance between so many surprises in manufacturing and maintenance practices that require time to understand the context of problems? Can we even do that when we don’t have enough documentation and time to properly train people who are also changing?

Condition monitoring is the path to go from scheduled maintenance to condition-based maintenance. However, classic condition monitoring methods are not working. They need specialized training, tools, and, most importantly, a lot of time that the industry simply doesn’t have. A move to sensor condition monitoring is aimed at solving this contradiction from a software perspective. Using software and factory automation devices to perform continuous and automated analytics, it is possible to reduce personnel training, and it is possible to avoid adding more sensors to the plant.

We will have to overcome the challenge of changing production systems as they evolve through maintenance and new operations. Falkonry has evolved an analytics approach that is able to adapt to changing circumstances in an automated, policy-driven manner.

Manufacturers are convinced that sensor condition monitoring is real and it can improve their operations. The only challenge is that methods of sensor-condition monitoring that require prior knowledge of all the possible issues that the machine may experience and their corresponding detailed data are just not feasible on scaled deployments.

We have seen many up close several manufacturing organizations facing this challenge, enabling us to build a novel sensor condition monitoring method that overcomes these challenges. With this approach, we can enable minutes to days of data analysis to a new and powerful self-supervised anomaly detection. What is there for you? You ask? The most prominent problem of traditional condition-based monitoring is that false alarms and anomalies not detected, are solved with big data analysis and minimal set-up effort. If you haven’t seen this in action yet, we should talk. Simply reply to this email, or connect with us to learn more.

Deep dive into Falkonry’s unique tech capabilities with CTO Dan Kearns

From cutting edge breakthroughs to the philosophy that drives development—CTO Dan Kearns takes us behind the scenes into the tech R&D at Falkonry.

Leveraging time series data for proactive maintenance management

Advances in artificial intelligence and machine learning are making data-driven maintenance a reality by utilizing advanced algorithms such as automated anomaly detection and event diagnosis. In this presentation, we will present our approach to using AI/ML to influence maintenance actions and to facilitate root cause analytics.

Falkonry at Future Upstream Automation Summit in Houston, TX

Come meet us at a peer-driven event for digitally reshaping the future of upstream oil and gas operations. If you wish to get a complimentary ticket to attend, we can help you. All you have to do, is reach out to us for a registration code.

Innovation Leader

Gartner Emerging Technologies in Edge AI. Falkonry was named in the hype cycles for AI as well as edge technologies in Gartner’s 2022 edition of technology trends. Falkonry is seen as a key (GII) integration and Edge AI software player by Gartner.

Briefs

Enhancing human effort with intelligent systems. Find out how explainability and the ever-increasing access to AI contributed to wide adoption of the technology, paving the way for use of AI in smart businesses. How maintenance, demand forecasting, and quality control can be optimized through the use of AI.

Playtime is over for data science. Playtime is over for data science. Processes that look at their datasets statistically tend to dominate contemporary data science methods for development, testing, and operationalizing of data-driven insights. However, these methods take too long to adapt to changing circumstances and that often leads to complete disconnection from reality.