No Deep Learning Predictive Maintenance

The Mean Time Between Failures (MTBF) for modern machinery can be very high. It can take years for equipment parts to wear out a collapse.

It is therefore virtually impossible to collect sufficient datasets of deteriorating equipment to build AI models for predicting when they require maintenance.

WildFaces' **Predictive Maintenance system** requires very small datasets for building predictive models for estimating when equipment will require maintenance.

More importantly we can provide **Preventive Maintenance Systems** as we can detect anomalies in the look, sound and smell of equipment and can use that to predict potential deterioration of performance.

Our Predictive Maintenance AI, based on multi-sensory AI utilizing video, sound and smell analytics, can automate labour-intensive inspection processes.

WildFaces' unique "Intuitive AI" approach requires NO Deep Learning, instead emulating complex human intelligence to address real-life complexity such as in equipment maintenance arena. As equipment failures happen at rare instances it is not possible to capture any defective data. As such, the deep learning approach is NOT practical as the starting point is usually the collection of massive datasets about the defective parts of each particular component. WildFaces' No Deep Learning "intuitive AI" can ensure successful AI adoption in the Maintenance space as it requires less than 30 images of components in good condition for training each component model. There is also no requirement of expensive and power-hungry GPUs making AI deployment portable and cost-effective.

Our No-Deep-Learning Anomaly detection methodology detects wear & tear from normal operating performance using video, sound and smell analytics. The system looks for dents, rust, scratches, loosening parts, thickening/thinning parts, changing color, oil leakage/ water leakage, vapor/smoke etc. Our Sound AI can detect 100+ of non-conversational maintenance related sounds such as vibration, loud engine, backfire, glass breaking sound and etc. For smell AI, we can pick up any complex chemicals that could be of a concern such as toxic chemicals.

WildFaces' patented "On-The-Move" WildAI capabilities works on IoT devices that can be mounted alongside Pan-Tilt-Zoom cameras, drones, moving robots and body-worn cameras.
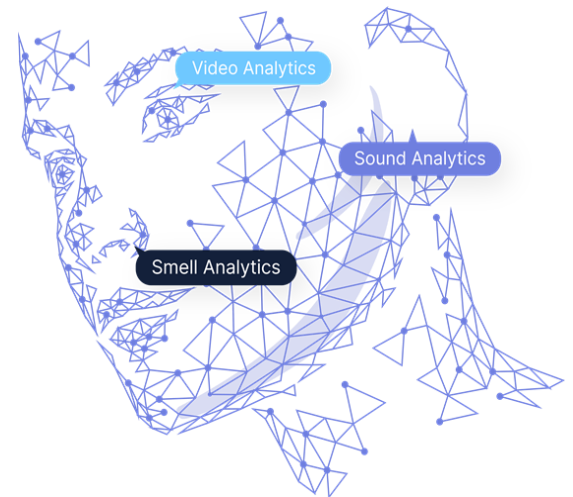
Whether machines are overheating, conveyor belts are making unusual sounds, escalators have foreign metal objects like coins and bolts on their steps or food products do not smell as they should, WildFaces' multi-sensory analytics can detect the anomaly and help identify equipment problems before a catastrophic failure occurs.
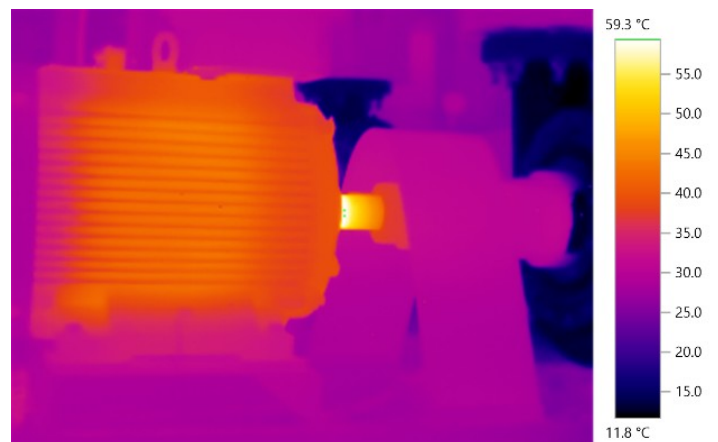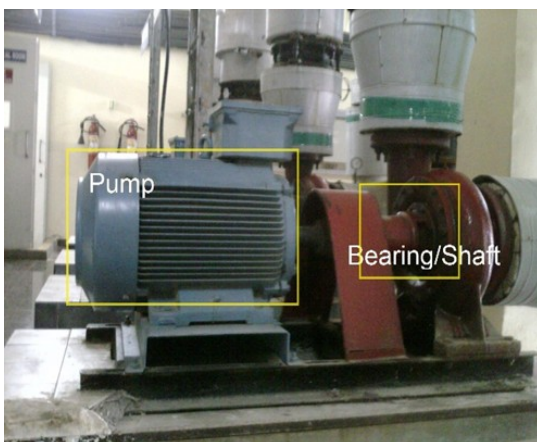
Advanced Multi-Sensory Analytics
(video, sound & smell) for Predictive Maintenance

COST EFFECTIVE

All WildFaces systems are designed to be cost effective and less expensive than other systems:

- they can use existing CCTV infrastructure

- they require low resolution cameras

- they require fewer cameras

- they do not require GPUs for computing.

- they use 90% less storage and network bandwidth

- they do not require a large control room environment – a smart phone becomes the control room.

SUSTAINABLE

As no GPUs are required the power supply requirement is significantly reduced.

The Carbon Footprint of the system is reduced usually by 16 times making this the fastest route to having a sustainable system.

AUTONOMOUS RESPONSE

o   When there is an issue the system can find the responsible person and tell

PRIVACY PROTECTION

o   All systems from WildFaces are privacy protected. Privacy is never compromised even though the system is aware and can raise alerts for all issues related to safety and care.

BENEFITS

- Very small datasets of images of deteriorating equipment are required to train the system. This greatly reduces the time for implementation.

- Because of the fast learning the technology can be applied to large quantities of diverse equipment.

- As the algorithms are computing light no GPUs are required.

- Multi-sensory analytics enables the system to behave and respond just as a human would.

CONTACT WILDFACES TO MAKE YOUR MAINTENANCE INTELLIGENT

INTERNATIONALLY PATENTED

- The core technology is internationally patented.

WildFaces.ai & **intel**
WildAI On-The-Move

All WildFaces Products run exclusively on Intel based computing hardware using

OpenVINO™

The use of Advanced AI technology that goes beyond Deep Learning enables WildFaces to run its systems without the need for 3rd party GPUs.

This reduces the power required by a factor of 16 – resulting in a 16-fold reduction in the carbon footprint.

This is just one part of a multi-faceted program to help customers to implement Sustainable Systems.

WildFaces.ai
WildAI On-The-Move

WildFaces' patented "On-The-Move" Artificial Intelligence (AI) based Analytics system, WildAI, revolutionizes video, sound, and smell analytics from mobile IoTs on drones, robots, and wearables. As a spin-off from a 2-decade long iOmniscient (www.iomni.ai), our systems have been deployed globally in 75 smart cities with 300 proven AI Use Cases.

WildFaces offer a wide range of Applications such as followings:
- NO Deep Learning Predictive Maintenance
- Anonymized Tracking to know your customers (with privacy protection)
- Effective Rodent & Waste Management
- Traffic congestion management
- Sound and Smell Analytics and MORE.

WildAI requires minimal training, is computing light (does not require GPUs) and can be deployed very quickly. It:
- Operates in real-time even when the sensor is "On-the-move".
- Requires no deep learning
- Is infrastructure light – fewer cameras required

70 Patents · Used By 75 Smart Cities · 300+ Proven Use Cases · AI FOR EXTREME CROWDS · Hybrid AI · NO Data Annotation · Quick Deployment

Autonomous Response · Privacy Protected (GDPR) · Low Res Capability · Long Distance Detection · Minimal Infrastructure · 20X Cheaper

Contact Us: 🌐 ✉

intel market ready ✓