



Inexpensive AI for Predictive Maintenance

AI for turning IoT data into insights and actions

INFXL offers a pair of complementary AI solutions for tackling the IoT data overload: Cloud-based IoT servers are receiving too much data, too frequently, from too many edge devices

EDGXL for ultra-low-power edge inference

CLDXL for high-throughput cloud inference

EDGXL cuts down on the frequency and amount of data uploaded by edge devices. It does that on inexpensive hardware while operating on μ Ws of battery power

CLDXL translates the insights received from a multitude of edge devices into decisions rapidly while employing a minimum of resources

INFXL LLC
Colleyville, TX 76034
www.infxl.com
(929) GO-INFXL

Contact: Altaf Khan
altaf@infxl.com
(707) 622 5823



Save time & money by switching from corrective, preventive, zero-hour, or periodic maintenance to predictive maintenance

Predictive maintenance gives early warning of impending machine failure, even before the symptoms become obvious. It drastically reduce downtime and maintenance costs.

Predictive maintenance increases availability and scheduling flexibility.

Predictive maintenance is based on the continuous monitoring of sensor data coming out of a complex system. Our advanced AI looks for suspect patterns in that data and notifies the maintenance team in case one is found.

CASE STUDY: Predicting failure of aircraft turboprop engines ahead of time

Predict engine failure during the next **1-15**, **16-30**, or **30+** operational cycles.

Run-to-failure data from 21 sensors, including those for temperature, pressure, RPM, fuel flow, fuel-air ratio, and bleed-enthalpy measurements were used to train an EDGXL module for predicting future failures. The dataset used consisted of 34,000 histories.

EDGXL predicts future failures of turboprop engines with an accuracy of 95%.

EDGXL for turboprop engines can run on an inexpensive MCU like the ARM Cortex-M0, requires only 17 kB of memory while operating on μ Ws of battery power.

Contact us to find out how INFXL's AI solutions help in reducing maintenance costs and preventing unexpected stoppages