Predictive maintenance at LACROIX Electronics
Predictive maintenance of reflow oven installed in Lacroix facilities

Oven fan monitoring using Machine Learning on STM32L4

NanoEdge AI library powered by ST Partner: Cartesiam
LEARNING & INFERENCE AT THE EDGE

Create best Machine Learning library for each STM32 project

No deep Data Science expertise required

Embed your library inside your main microcontroller program

Customized for optimal performance
Memory efficient

Learn and infer at different edges with the same library

1. Semi-supervised Learning
2. Detect anomaly based on Edge-created ML model

Learn more on Cartesiam partner web page
Classify anomalies using Neural Networks on STM32

Train Neural Network using any major AI frameworks

Convert NN into optimized code

Run on optimized runtime

Learn more on Neural Networks and STM32
AI Solutions on STM32

A full development ecosystem to create your AI application

STM32 Cube.AI

AI extension for STM32CubeMX to map pre-trained Neural Networks

STM32 Community with dedicated Neural Networks topic and AI expert partners

Trainings, hands on, MOOCs and partners videos

FP-AI-VISION1
Person presence detection
Food classification

FP-AI-SENSING1
People activity recognition
Audio scene classification

FP-AI-NANOEDG1
Condition-based monitoring
FP-AI-NANOEDG1 code example on STWIN

Get straight to proof-of-concept with full anomaly detection system without deep Data Science knowledge

1. Collect dataset from industrial-grade vibration sensor
2. Generate free ML library
3. Integrate and deploy
4. Install on premise
5. Incremental learning on-target
6. Monitor anomalies on-target

Download the dedicated SW package
STM32 solutions for AI
Leverage the power of Edge AI

Powerful ecosystem
Visit st.com/stm32cubeai

ST AI Expert team
AI co-development partnerships
Contact us at edge.ai@st.com

Meet our expert partners
Visit Cartesiam partner web page
To learn more about the solution

Chat online with Edge AI experts during ST Live Days (Nov. 19th)

- Miguel Castro
- Raphael Apfeldorfer
- Stephane Henry
Thank you