

ST LIVE DAYS

Predictive maintenance at LACROIX Electronics

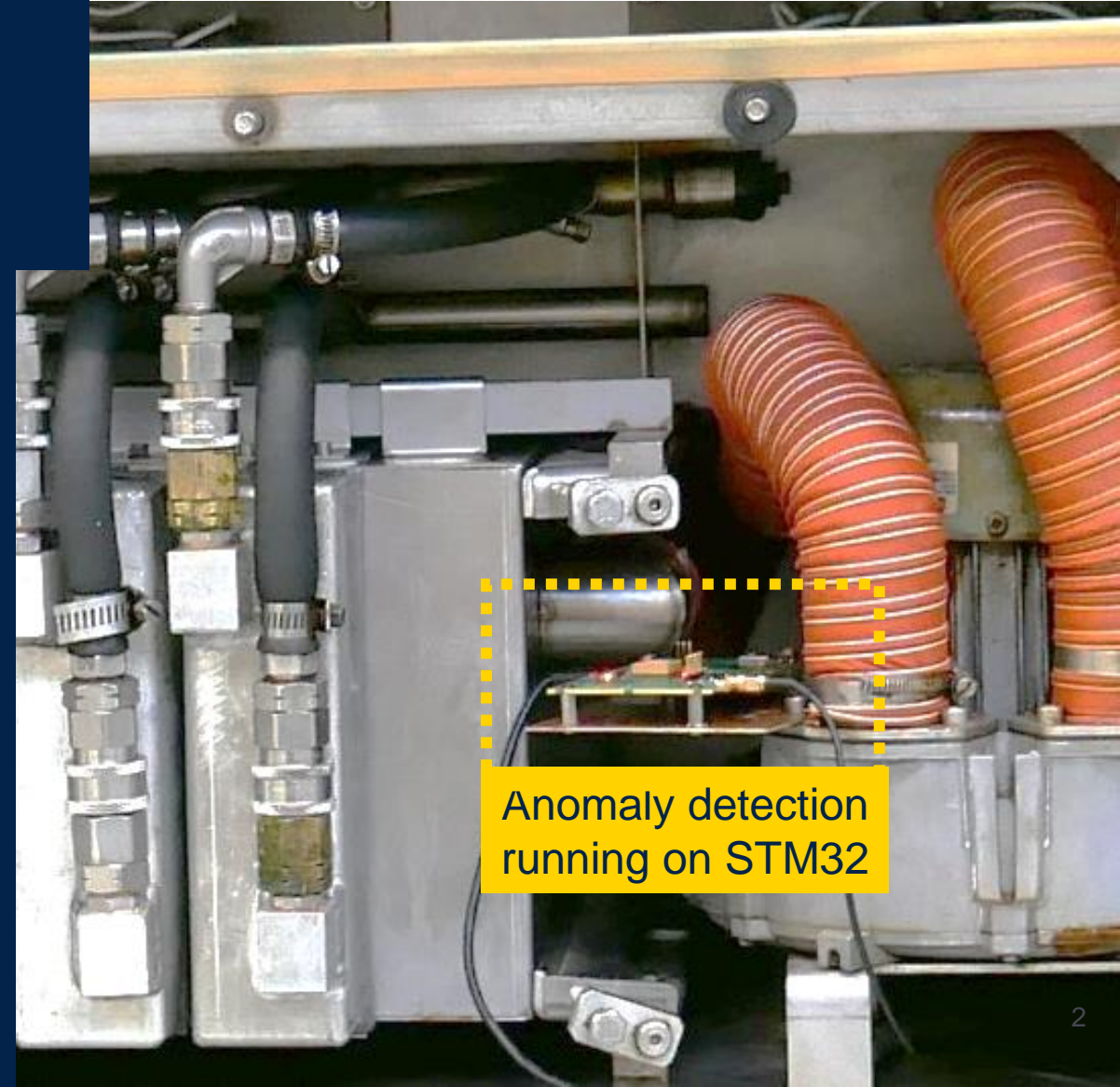


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Predictive maintenance of reflow oven installed in Lacroix facilities

Oven fan monitoring using Machine Learning on STM32L4

NanoEdge AI library powered by ST Partner: Cartesiam



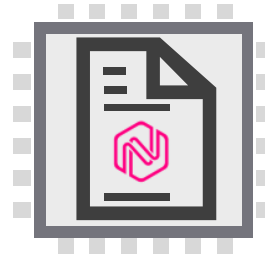
LEARNING & INFERENCE AT THE EDGE

Create best Machine Learning
library for each STM32 project



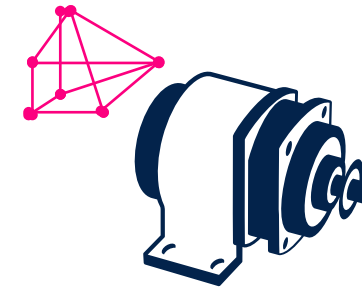
No deep Data Science
expertise required

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



And more

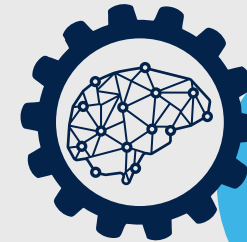


Convert NN into optimized code

STM32
Cube.AI



Run on optimized runtime



run-time



AI Solutions on STM32

A full development ecosystem to create your AI application



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



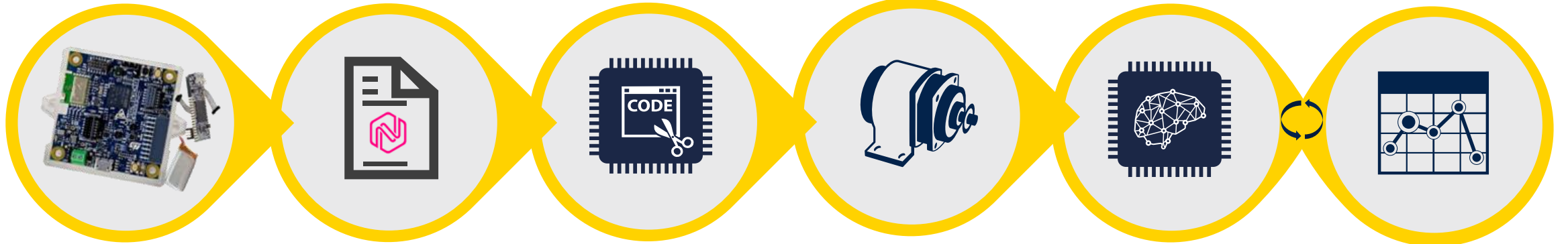
Condition-based monitoring



FP-AI-NANOEDG1 code example on STWIN

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

NANOEDGE AI
STUDIO 



Collect dataset from industrial-grade vibration sensor

Generate **free** ML library

Integrate and deploy

Install on premise

Incremental learning on-target

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

ST AI Expert team

AI co-development partnerships

Contact us at edge.ai@st.com

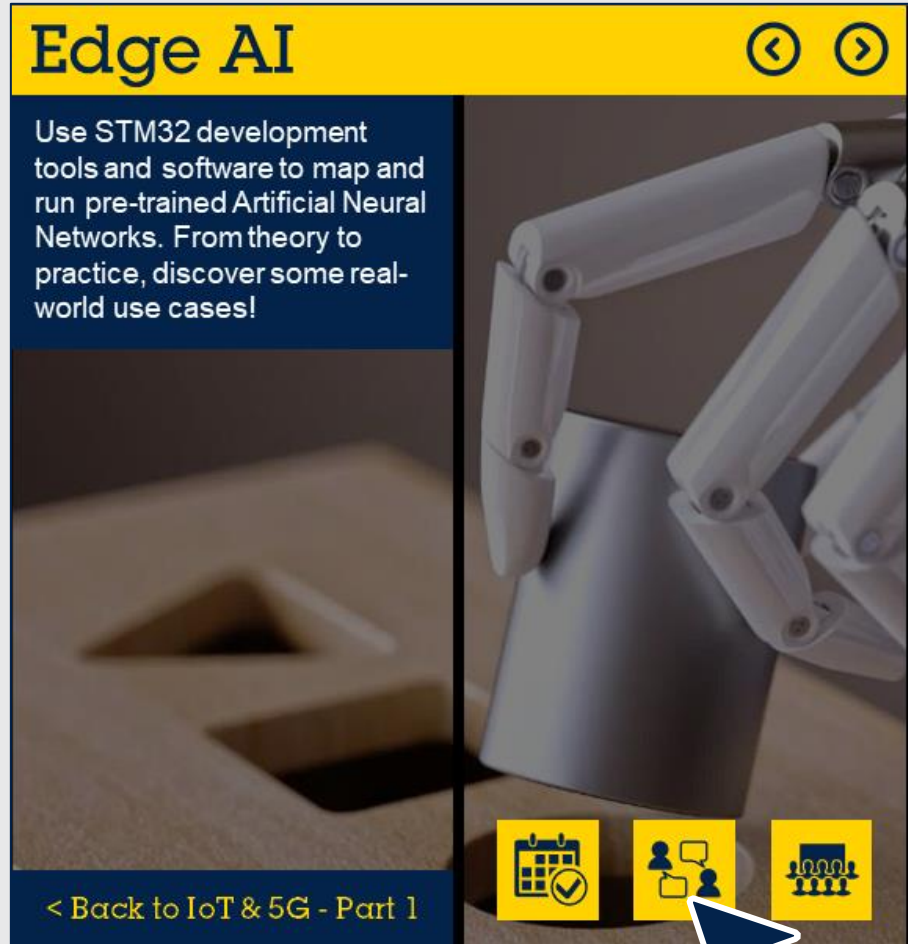
Partner
Program



Meet our expert partners

Visit [Cartesian partner web page](#)

To learn more about the solution



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



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- Miguel Castro
- Raphael Apfeldorfer

- Stephane Henry

Thank you

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