EDGE IMPULSE

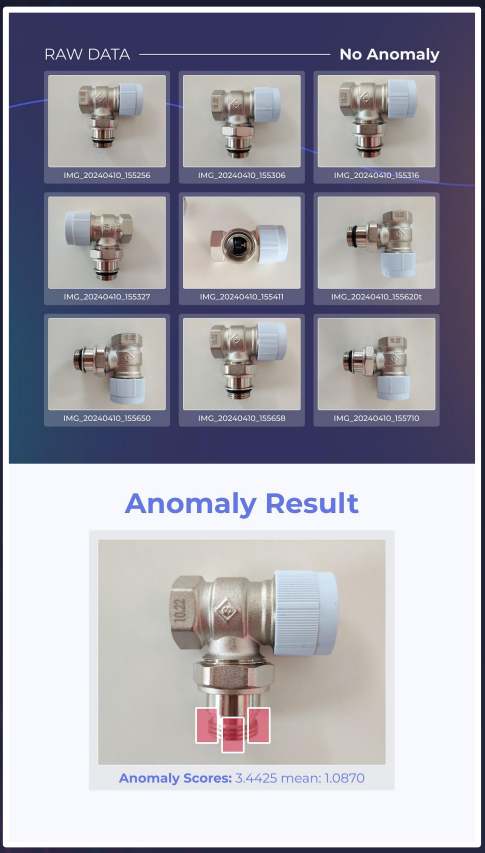
Visual Anomaly Detection

Unsupervised Learning On The Edge

In machine learning, generating visual anomaly detection models traditionally requires datasets consisting of identified and categorized abnormalities. Obtaining relevant data for this can be challenging, as it is not always feasible to collect real-world samples for every possible anomaly, especially for unexpected outcomes or when trying to build models for dangerous scenarios such as factory fires or equipment malfunctions.

FOMO-AD, Edge Impulse's new visual anomaly detection training pipeline, rectifies these challenges. Users can now create models based solely on "normal state" data, enabling real-time, on-device insights without the need for manual training on anomalies.

This means businesses now have the ability to easily catch any discrepancy or unexpected error in any environment they monitor. From quality control to defect detection and beyond, FOMO-AD offers huge benefits to vision-based applications for industrial production, automotive, medical, silicon manufacturing, and more.



Top Composite Image: *Normal state*
Bottom Image: *Anomaly detected — missing black band*

No Connectivity Required	Any Edge AI Hardware	Detect Everything Instantly
Systems will work without any internet or cloud connectivity to ensure anomalies are detected even in the most remote and complex environments.	On-device performance estimations are provided for each model iteration and the architecture is supported on any edge AI hardware, from MCU to GPU.	Any view can now detect any anomaly, in any environment, and the system owner can define the reaction.

Learn more at edgeimpulse.com

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