



Deploying intelligence in embedded devices with STM32 edge AI tools

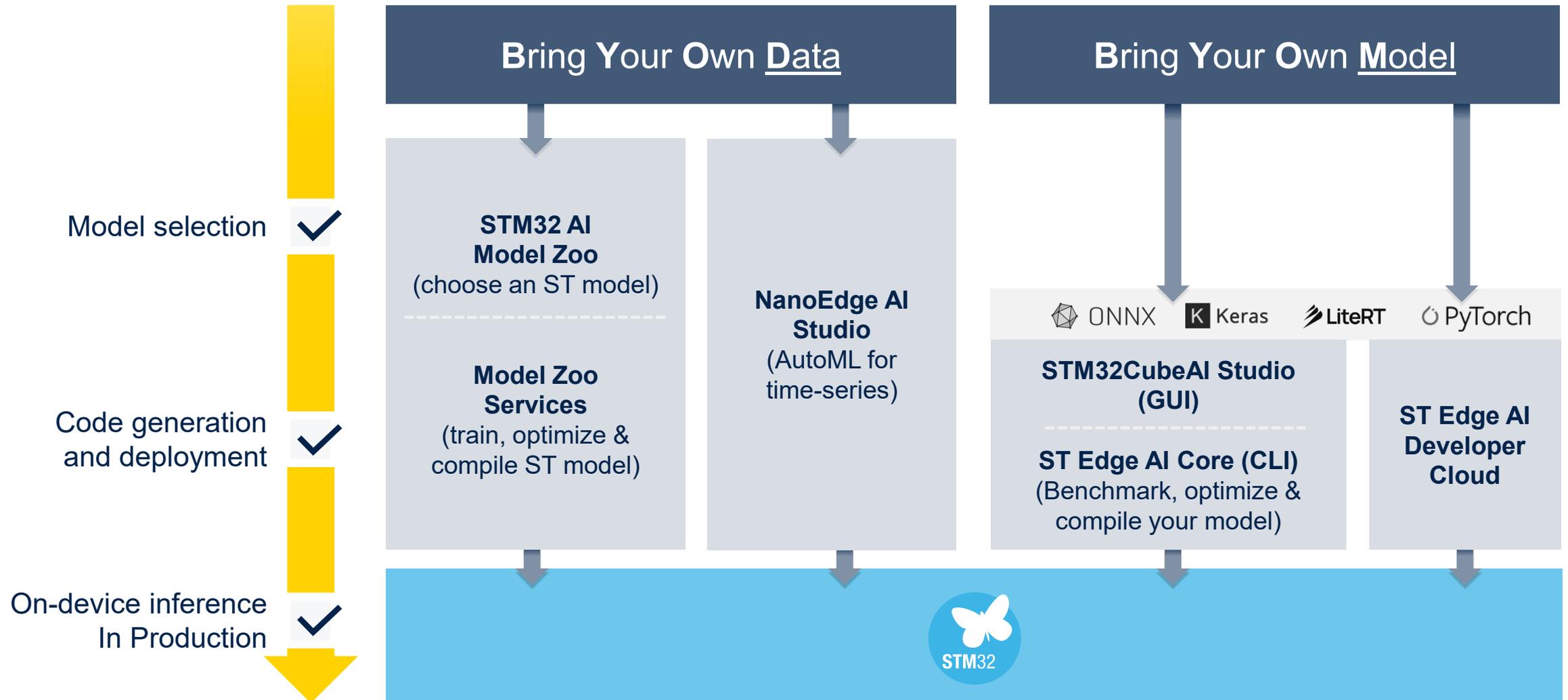
Feb 2026



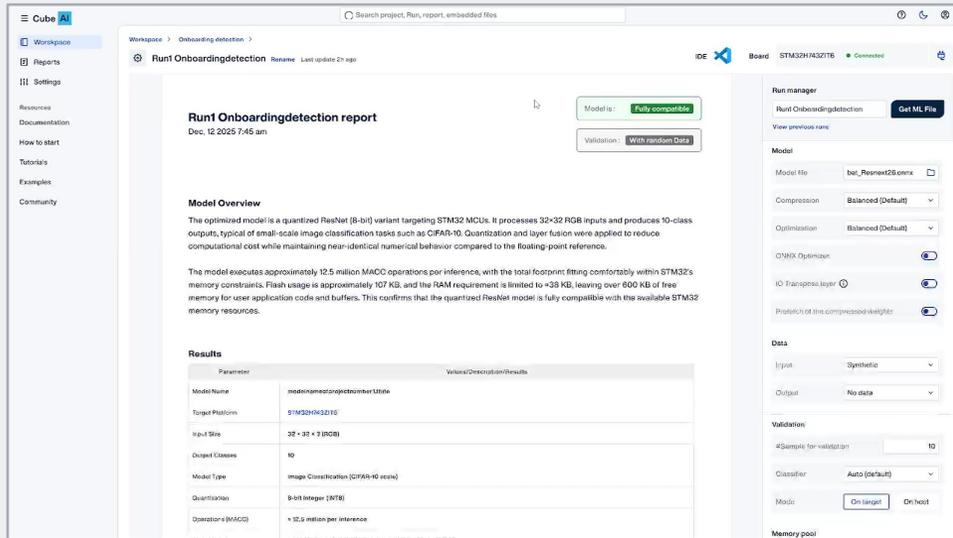
**Develop faster
with free STM32 edge AI tools**



STM32 Edge AI User Flow



STM32CubeAI Studio



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Current version: V1.0
(Feb 2026)

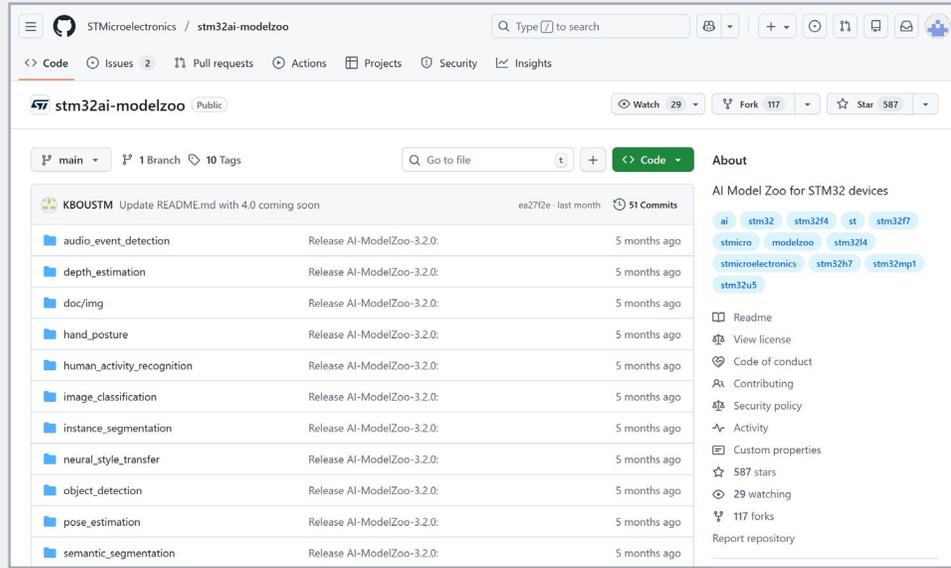


Evaluate, optimize and compile neural network models for STM32.

- Generate an STM32-optimized library from pretrained neural network and ML models
- Use detailed information about AI model RAM and flash memory sizes
- Validate optimized model against reference model on host and on target
- Support for ST Neural-ART Accelerator neural processing unit
- Support for 32-bit float and quantized neural network formats (TensorFlow™ Lite and ONNX Tensor-oriented QDQ)

An evolution of STM32Cube.AI supporting the latest generation of STM32 MCUs, and offering a smooth user experience.

STM32 Model Zoo



Access now

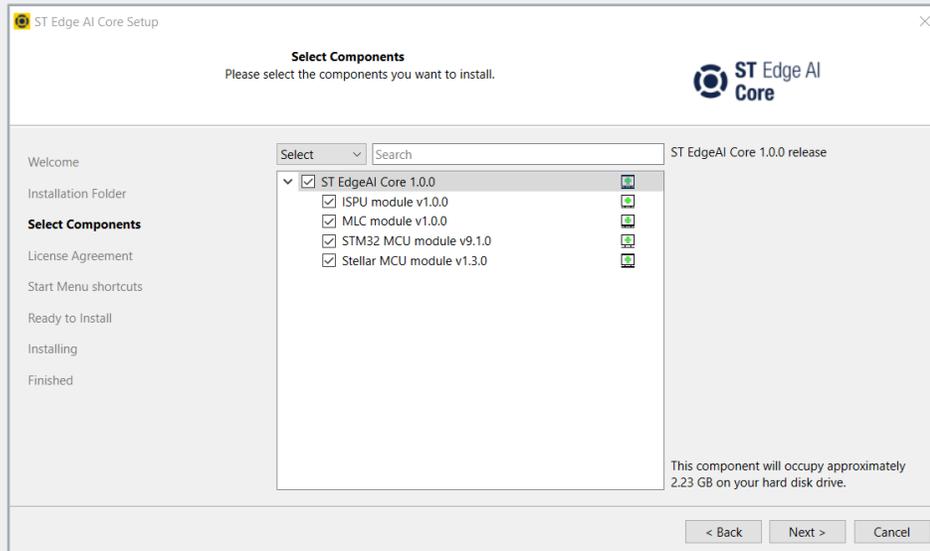
Current version: V4.0
(Feb 2026)



The largest collection of free reference edge AI models optimized for STM32

- Choose from a collection of AI models optimized for STM32 devices
- Retrain any model from datasets using the scripts
- Deploy AI models on the application using the scripts
- Bring your own model (BYOM) or bring your own data (BYOD)
- Available on GitHub
- Free-of-charge, user-friendly license terms

ST Edge AI Core



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Current version: V3.0
(Dec 2025)



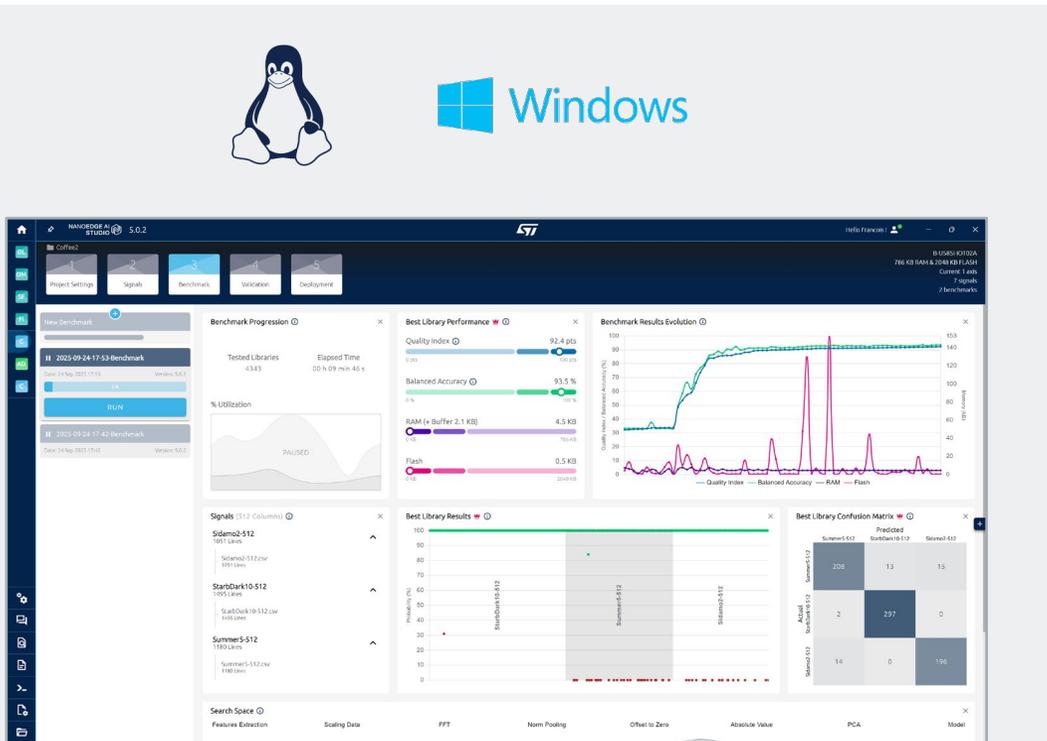
Optimize and compile edge AI models for STM32 with this command-line interface tool (CLI)

- Supports multiple ST devices, including microcontrollers, microprocessors, and MEMS sensors
- Import AI models from the most popular ML frameworks
- Review the detailed analysis of the selected algorithms
- Validate and optimize the models for different devices
- Generate executable code for the selected ST hardware
- Support ST Neural-ART NPU and HSP

NanoEdge AI Studio

Free AutoML tool to develop your time series ML library in a fast and efficient way.

- Find and configure the best AI library for your embedded project.
- Supports STM32 microcontrollers and smart sensors
- Use synthetic data for creating anomaly detection models
- On-device learning for optimized anomaly detection
- Simplified data extraction from sensors
- Free-of-charge, user-friendly license terms



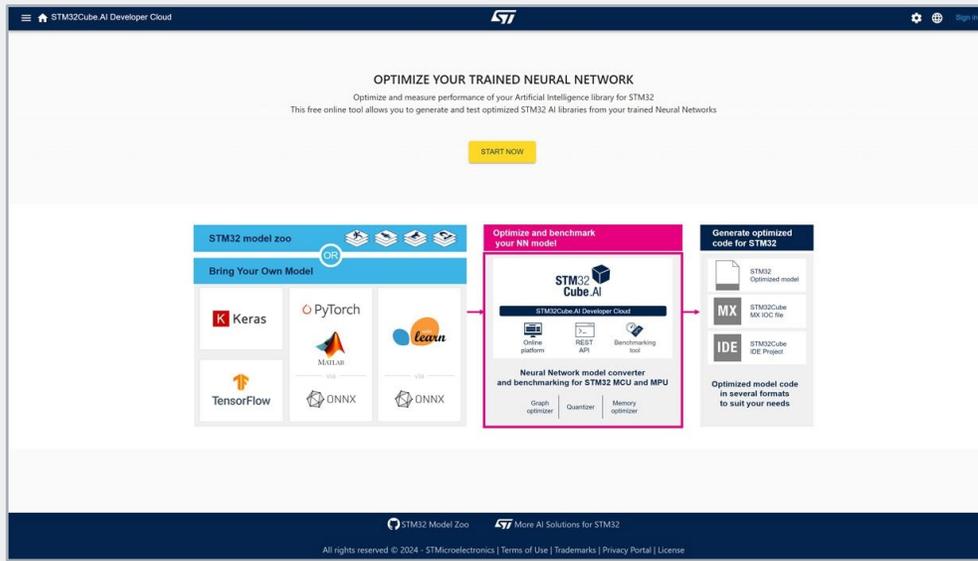
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Current version: V5.1.0
(Feb 2026)



ST Edge AI Developer Cloud



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Evaluate and benchmark your edge AI models in the cloud

- Built on ST Edge AI Core to perform AI model optimizations and validations on multiple ST devices
- Online AI benchmark service on multiple ST devices
- Optimize and profile your AI model
- Run your AI models on the ST board farm

ST edge AI model partners



Facilitating the design of custom-made solutions

ST and Authorized Partners deliver ready-to-use solutions and speed up customer application development.



Irida Labs



EmbedUR



Ultralytics



Siana Systems



ClearML



id3 Technologies



OpenMV



Rtone



Edge impulse

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Browse our case studies and find inspiration for your next project

Case studies

Discover how to improve embedded solutions using edge AI.

Search our library

TYPES

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- Idea
- Partner
- Demo

RESOURCES

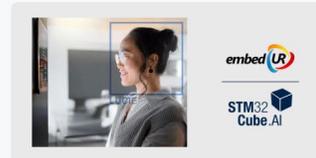
- Tutorial
- Function-Pack
- GitHub
- Video
- Dataset
- Model zoo

INDUSTRY

- Entertainment
- Wearables
- Smart city
- Smart home
- Smart building
- Smart office
- Industrial

HARDWARE

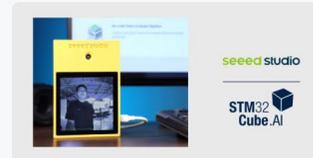
- STM32 MCU
- MEMS MLC
- STM32 AI MCU



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How to personalize smart home with familiar face identification

embedUR's on-device face authentication embedded on STM32N6 with easy mobile enrollment



VISION | STM32CUBE.AI | STM32 AI MCU | PARTNER | SMART HOME

Handheld development platform for real-time vision, motion, and voice at the edge

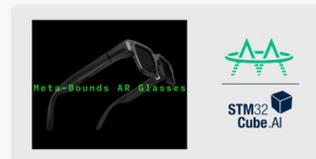
All-in-one STM32N6-based platform for on-device edge AI with NPU acceleration



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Secure entry systems using id3 face recognition with liveness detection

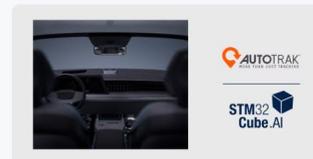
Edge processing with RGB camera and ToF sensor ensures rapid and secure anti-spoofing for access control using the...



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How ultralight AR glasses are redefined with Edge AI

Meta-Bounds elevates AR glasses with STM32N6 MCU edge AI and computer vision technology



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How Autotrak enhances in-cabin monitoring with cost-effective edge AI

Prevent distracted driving with real-time edge AI camera technology powered by the STM32N6 microcontroller

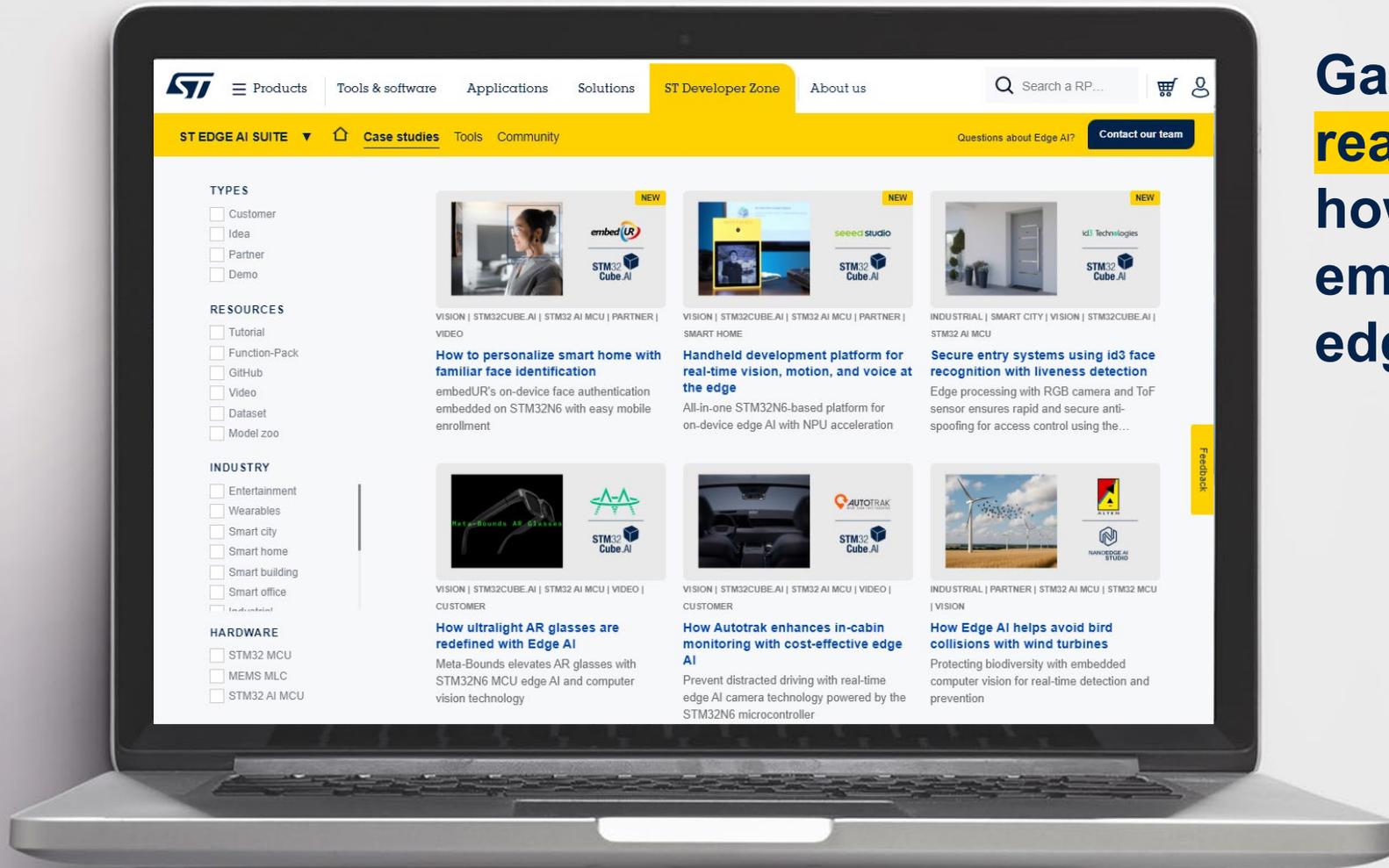


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How Edge AI helps avoid bird collisions with wind turbines

Protecting biodiversity with embedded computer vision for real-time detection and prevention

Gain **valuable insights from real-world case studies** on how to improve your embedded solutions using edge AI.



AR-Glasses
10 hours
On single-charge

Meta-Bounds AR Glasses



Panasonic



Virtual sensor

Tire pressure
measured through the
e-motor current
consumption

~15-40%
Energy saving per
washing cycle



**Predictive
maintenance**

Multisensors and
learning on device



**Electrical arc
detection**

Enhanced accuracy to
avoid false detection



**Computer vision
on MCU**

Cost-effective, compact,
and low-power solution



Virtual sensor

Measuring motor
internal temperature
based on external data



**Smart context
detection**

In/out bag - on table



SOXAI

10+ hours

Battery-life with
low-power sensor



Our technology starts with You



Find out more at www.st.com/st-edge-ai-suite

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