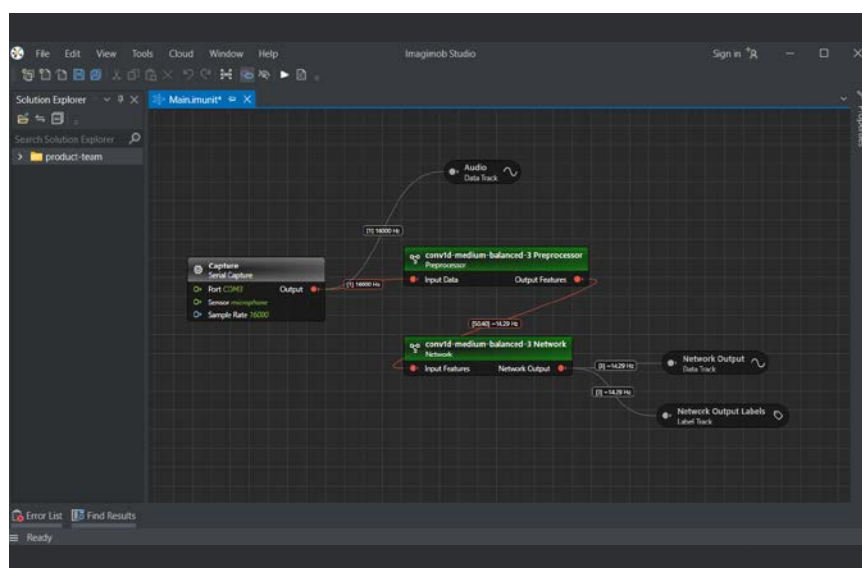# Imagimob Studio

End-to-end development platform for AI / machine learning on edge devices

Imagimob Studio is the fastest way for experts and non-experts alike to easily build production grade machine learning (ML) models for a wide range of use cases.

This end-to-end development platform for AI/ML, together with ModusToolbox™, covers the entire ML to embedded software journey in a way that is optimized for edge devices.

Developing ML applications for edge devices is both complex and costly, and typically requires large engineering teams. Imagimob Studio reduces the development resources needed by streamlining the entire process from data collection/ingestion, through model building, all the way to deployment, and verification on device. This workflow is visualized using Imagimob's unique Graph UX interface.

Imagimob Studio is targeted toward domain experts, ML engineers, and embedded engineers who want to develop custom ML applications for embedded devices. This works for companies that want to build an ML model from scratch, starting with data collection and import. It also works for companies who have ML models that need to be optimized for the edge, or for specific hardware.

www.imagimob.com

Key features

– Supports the end-to-end development process from data collection to model deployment
– Imagimob model optimization enables building of custom ML models for any microcontroller
– Tested and proven for development of production ready ML models
– Unique Graph UX interface makes development process easier to follow and provides rare insight into ML models as they are built
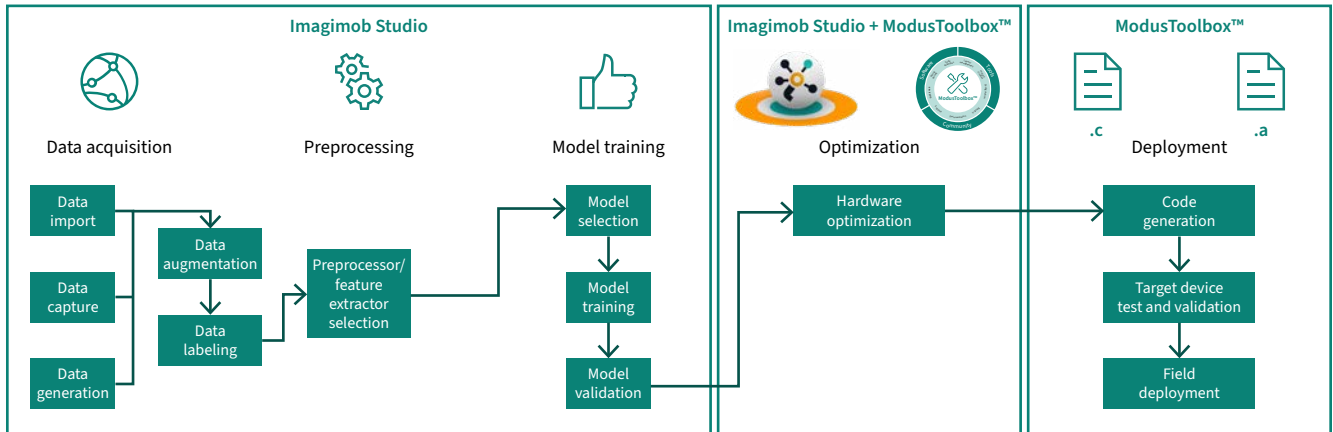
Key benefits

– Reduces time to market and the complexity of edge AI development
– Simplifies model validation and quality assessment
– Flexible and customizable to your hardware and use-case
– For ML experts and non-experts alike
– Supports entry at any stage of development; start from scratch or import and improve existing models
– Transparent data policy lets users retain control of data

Key use cases

– Acoustic event detection (i.e., siren, coughing, etc.) in commercial products
– Gesture detection and material classification using a radar sensor
– Vibration/signal analysis (i.e., for classifying the state of a machine)
– Motion classification
– Keyword detection

Diagram

Specification and compatibility

Hardware requirements

– Models developed in Imagimob Studio can be optimized and packaged for deployment onto PSoC™ 6, AURIX™ TC3x, and any other MCU (streamlined process for IFX hardware via ModusToolbox™)
– Infineon's AI evaluation kit is recommended for evaluation
– Models can operate on a wide range of input from many different sensors (such as touch, microphone, voltage and current radar, and most other time series data)

Hardware requirements

– Model footprint starting as low as 1 kB RAM and 1 kB FLASH
– AutoML optimizes your models all the way from the neural network structure to target-specific optimizations for your MCU or NPU

Additional software tools

– Starter projects, code examples, etc. available in Imagimob Studio
– More information and guides available at developer.imagimob.com
– For streamlined deployment onto Infineon hardware, use ModusToolbox™ Software
– Visit our website to learn more. From there, you can register a free account and download Imagimob Studio to get started.

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Additional information
For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your Imagimob (contact information on www.imagimob.com).

Warnings
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