

An easy-to-use AI toolkit and SDK for computer vision, model training and inference.



Trainer

Mark image, create and train tasks, verify training tasks.



Scheduler

Schedule and train multiple tasks.

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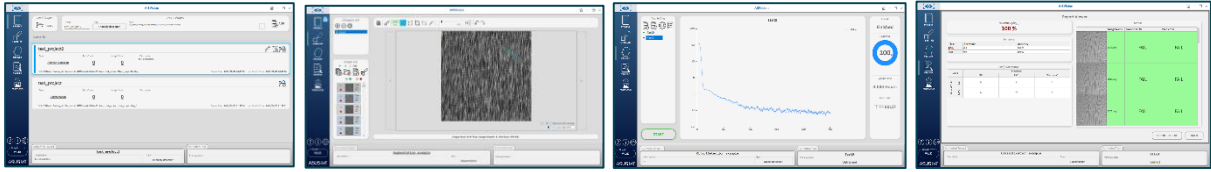
ASUS IoT AISVision is an easy-to-use toolkit that allows developers to create computer-vision capabilities using ASUS AI techniques. With three working modes — **Trainer**, **Runtime** and **Scheduler** — the AISVision toolkit can be used in AI training, inference or batch-training scenarios.

This toolkit covers some of the basic knowledge developers need to create an AI model in just a few minutes. It enables specialist knowledge to remain confidential within the domain while empowering developers use the toolkit to create AI applications.

The toolkit also provides runtime modes that can be used as an inference engine with either GPU or CPU, or both, to obtain in-line data for analysis. The data can be exported for further analysis, visualization, database management or services related to the edge. Scheduler mode be used to train pre-defined tasks in a batch for better efficiency.

Intuitive, simple, and quick project set-up

4 steps to finish AI model training and verification with zero-code AI model training.



Choose model

Label image

Train model

Verify model

Features and benefits

High precision diverse algorithms

- ✓ Supervised and unsupervised learning
 - Unique data-augmentation technology enables accurate training with a small number of samples

Highly flexible inference architecture

- ✓ Supports inferencing by either GPU or CPU — or both.
 - Unique model capabilities, backed by NVIDIA® and the Intel® OpenVINO framework, empowers efficient, high-accuracy inferencing in any scenario

Model training and validation

- ✓ No-code model training.
 - Allows the model to be trained to directly simulate the production-inspection time
- ✓ Training-free model validation tuning
 - Environmental changes around the production line, such as natural light, can be quickly varied — eliminating the need to re-label or add training data

User-friendly software development

- ✓ Unique re-train mechanism to ensure data privacy.
- ✓ Friendly mechanism for online software updates
- ✓ Strong API support, including C, C++, and C#

Intuitive labelling tool

- ✓ Easy-to-use and intuitive integrated labelling, including pen, polygon, ellipse, rectangle and line tools

Unique scheduler features

- ✓ Allows the model to be trained centrally, significantly increasing the speed of AI model advancement

System Requirements

Trainer

Processor	12th Generation Intel® Core™ i7 (recommended)
DRAM	16 GB or more
O.S.	Windows 10 (64 bit) Professional
USB	1 free USB port (for license dongle)
Graphics	NVIDIA® GeForce® RTX3060 6GB above (recommended)
Required system storage	8GB
Required system storage for Intel® OpenVino support	2.5GB

Inference / Run-time

Processor	12th Generation Intel® Core™ i7 (recommended)
DRAM	16 GB or more
O.S.	Windows 10 (64 bit) Professional
USB	1 free USB port (for license dongle)
Required system storage	300 MB or more (Depends on model size)
Graphics (NVIDIA environment)	NVIDIA® GeForce® RTX3060 6GB (recommended)

Developer

CUDA: cuda_11.1.0

CUDNN: Cudnn8.2.1

Visual Studio 2017

Supported languages : C/C++, and C#

Ordering Information

■ Model: AISVision AI Toolkit
(P/N: 90IM0050-M2TB00)

■ Model: AISVision AI Runtime
(P/N: 90IM0040-M2TB00)