

7 Powerful Features You Should Know About for Building Better Spatial Perception Systems with EdgeFirst Studio



At Au-Zone Technologies, we've built EdgeFirst Studio to streamline the journey from raw sensor data to deployed perception models, especially for challenging real-world environments. If you've browsed our EdgeFirst documentation, you know the platform is packed with powerful tools. Here are 7 standout features you should definitely know about:

1 Automatic Ground Truth Generation (AGTG)

Manually labelling datasets can be tedious and error-prone. With AGTG, EdgeFirst Studio automates dataset annotation by using AI-driven techniques, accelerating dataset creation and improving consistency.

3 Fusion Model Support

EdgeFirst Studio isn't just about vision! It natively supports sensor fusion, enabling the training of models that combine vision with radar data for more robust perception in adverse conditions, such as fog, rain, and dust.

5 Foxglove Studio Integration for Visualization

EdgeFirst Studio integrates tightly with Foxglove Studio, allowing teams to visualize datasets, inspect 3D spatial perception, and debug complex perception pipelines through an intuitive graphical interface.

7 API-First Design for Automation and Customization

Want to integrate EdgeFirst into your own pipelines? The full Studio Client API lets you automate dataset creation, model training, validation, and deployment, perfect for scaling operations or building custom developer workflows.

2 ModelPack for Real-Time Detection & Segmentation at the Edge

ModelPack is capable of real-time object detection & segmentation with as little as 0.5 TOPS. See for yourself what you can achieve in under an hour from data collection to deployed real-time object detection & segmentation by following the ModelPack Tutorial.

4 Built-in Middleware and Dataset Collection Tools

With services like the MCAP Recording and Replay Service, developers can capture, review, and replay synchronized sensor data streams, crucial for building and debugging multi-sensor systems.

6 Advanced Data Augmentation for Vision Models

Do you need to make your models more robust? EdgeFirst Studio offers a wide range of configurable vision augmentations, such as brightness, noise, blur, and geometric transformations, which are critical for training models that can handle the variability of real-world scenes.

Interested in trying EdgeFirst Studio?

Contact us to get started and see for yourself how easy it is. Our platform is designed to get you up and running quickly, enabling you to deploy visual perception at the edge up to 10x faster.
www.edgefirst.ai