## Making video analysis applications intelligent

With AI technology developing fast, the demand for smart solutions grows rapidly. To keep up the industry is challenged to incorporate intelligence into their products. AVUTEC's computer vision platform CortexFramework provides a development, deployment and management environment, that meets all video content analysis needs. Unlock the power of deep neural networks and machine learning, shorten the development cycle drastically and enlarge business potential.

The AVUTEC ecosystem
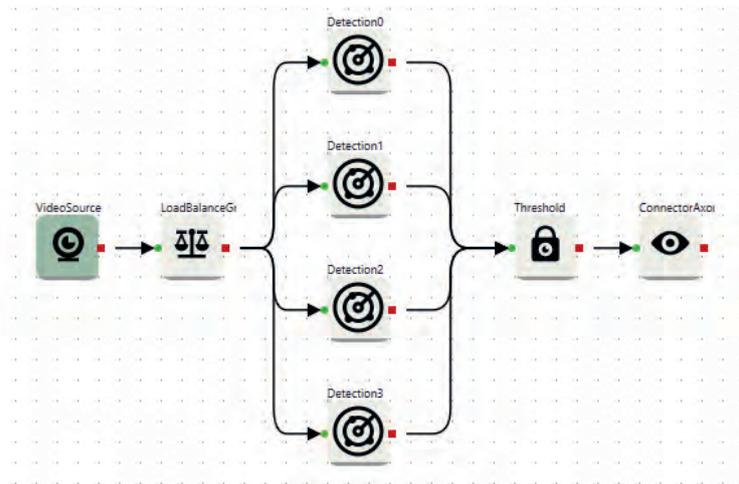
A deep learning example Cortex existing of Axons interconnected by video and messaging paths running an AVUTEC object detection network.

A configuration of pre-built Axons, or building blocks, form a Cortex representing an end-to-end computer vision application. Images flow through the Cortex being processed, contextually analyzed and prepared for exchange with third party systems. CortexTemplates provide example design to ease up the creation of custom computer vision applications. Simply drag-and-drop Axons in a Cortex design and connect them using CortexClient.

Scalable flexibility
Windows, Linux or ARM? In the cloud, on-premises or at the edge? Small or large scale projects? CPU, GPU or NPU? CortexFramework can be integrated in every ecosystem providing the essential video content analyzing skills.

Ease-of-use
AVUTEC's graphical interface CortexClient provides drag-and-drop mapping tools, along with a vast library of building blocks, enabling to easily build and integrate simple to sophisticated real-time video processing applications.

Low Total-Cost-of-Ownership
Remotely configurable, CortexFramework ensures cost-effectiveness. CortexClient's extensive set of tools to configure, monitor and manage eliminates on-site maintenance, keeping operational costs low.

Industry standard
Interfacing with CortexFramework is made easy with the implementation of industry standard protocols.

CortexFramework

The Framework

The framework contains all functionality for video content analysis including system integrations. Input Axons accept video streams from all sources and in all formats. The processing Axons prepare images for video content analysis and run AVUTEC's deep learning routines and computer vision algorithms.

With an extensive library of pre-built connector Axons CortexFramework integrates out-of-the-box with VMS, management and database systems. Tailor-made Axons serve to meet client specific requirements. A feature rich developer SDK is available for integrators to build server or client side applications.
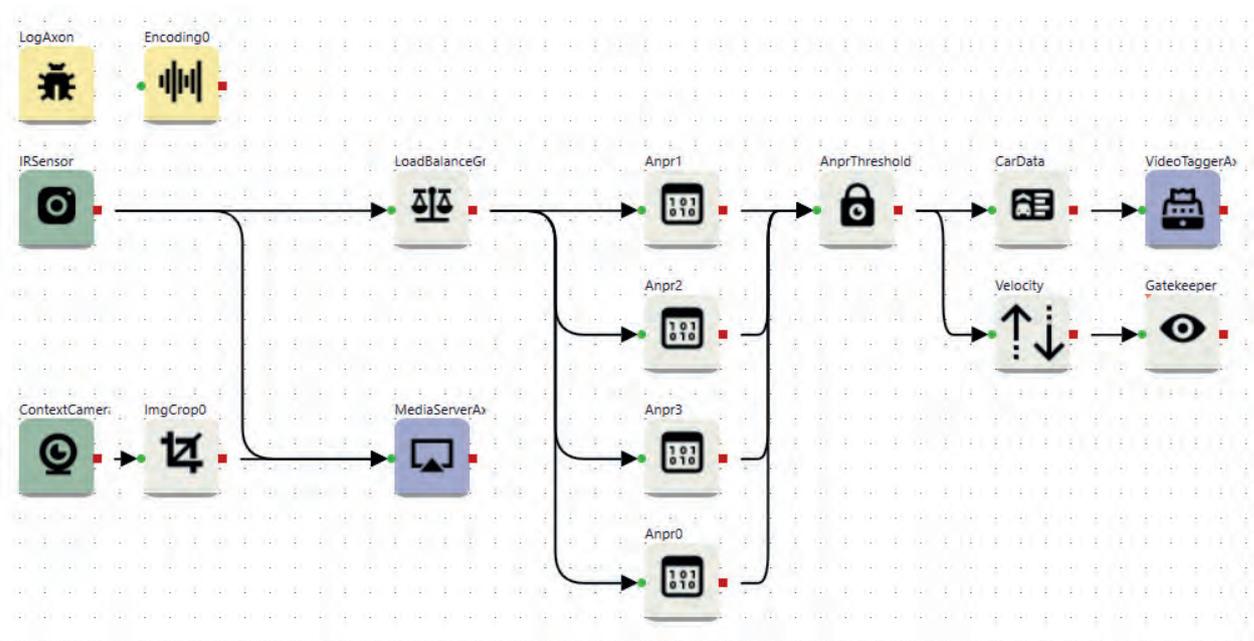
A Cortex running on the Gatekeeper, AVUTEC's embedded ANPR camera, implementing the MediaServerAxon turning the Gatekeeper in an ONVIF device, the VelocityAxon determining direction of a moving vehicle and the VideoTaggerAxon bookmarking events in a VMS.

Why AVUTEC

As a Dutch manufacturer of hardware, developer of CortexFramework and designer of deep learning models, AVUTEC is in full control of every aspect of its computer vision solutions. Building everything from scratch, AVUTEC delivers customer-centric solutions. Our connective platform adds intelligence to solutions creating added value for our partners.
AVUTEC is always interested to learn how we can be of service in any video analytics challenges. We invite you to contact our computer vision specialists to explore your possibilities further.

CortexFramework