



In an evolving world, requirements change. It may have been sufficient to have camera surveillance with regular cameras. Nowadays however, the benefits of having surveillance augmented with video content analysis, like ANPR -Automated Number Plate Recognition- or people tracking has proven its value. Where the Gatekeeper, AVUTECH's visual IoT sensor, offers an embedded solution at the edge, CortexServer and CortexServer NPU add intelligence to an (existing) camera system.

CortexServer: Add ANPR to existing systems

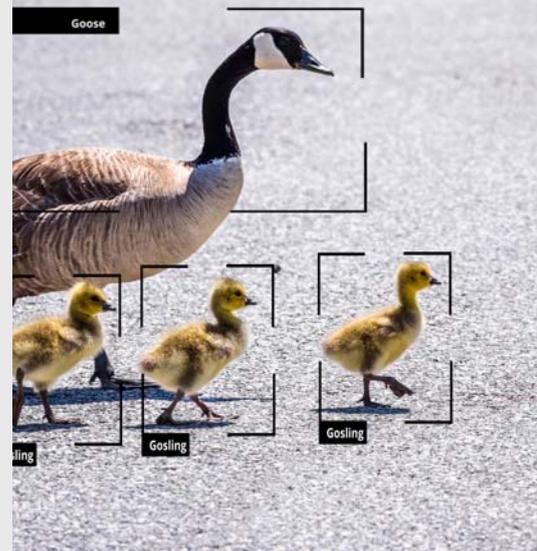
Adding AVUTECH's CortexServer to an existing camera system instantly provides automated detection and analysis of number plates. The dedicated hardware of CortexServer even ensures compatibility with analog cameras. One single ANPR server can process the images of at least 8 analog cameras or a total of 20MP from digital input. CortexServer is suitable as both a stand-alone solution and as part of a complex application.

Whether traffic is flowing or stationary, AVUTECH's ANPR engine makes sure all number plates are detected and analyzed. CortexServer is a preloaded hybrid ANPR server, its high-end components and dedicated hardware interoperate with any camera system. As an addition to an existing camera system, the output of CortexServer can contain nothing more than the ANPR data needed keeping bandwidth usage low.



CortexServer NPU: Add AI to existing systems

Where the regular CortexServer is perfectly suited to add the detection and analysis of number plates to any existing camera system, CortexServer NPU is suitable to run deep learning applications. Neural processing units add the speed necessary to fluently detect objects, classify images, segment video output or understand human movement.



CortexFramework

Both CortexServer and CortexServer NPU come with CortexFramework installed. AVUTECH's modular software platform for computer vision applications analyzes video data in real-time, regardless if it is hosted in the cloud, on a local server or at the edge in a deep learning IoT sensor. Results obtained from detection, tracking or classification are provided in a well-defined format, that enables easy integration with any other system.

CortexFramework is the foundation of every AVUTECH product. It allows users to build and manage computer vision applications from a single modular development and operational environment. By building a personalized configuration, ANPR or detection events can trigger actions and alarms across any integrated system. Refer to the CortexFramework brochure or visit our website AVUTECH.com for more information on this computer vision platform.



CortexClient

CortexClient is AVUTEK's graphical interface to remotely configure CortexFramework. It allows to visually build and configure Cortexes, personalized computer vision applications. CortexClient is the client to connect to and manage all CortexFramework devices, local and remote. 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.

CortexDashboard

The online dashboard provides a real-time overview of the active detection by displaying the live video stream. It shows graphics and statistical reports to give a clear insight in for instance peak hours, recurring license plates or counted people or bicycles. The dashboard is customizable to suit all needs, and since it is offered in a browser, it can be viewed on smartphones, tablets and laptops.

Benefits of CortexServer

- Input is accepted from both analog and IP cameras
- CortexServer is a plug and play device
- CortexFramework is pre-installed and running
- Easy configuration with the use of CortexClient
- Centralized management and monitoring of multiple CortexServers is done with CortexClient
- A hardware watchdog ensures a reliable 24/7 operation
- Integration with POS, VMS, BMS, SMS and other financial or security software management systems
- All data can be stored in external databases, cloud solutions or a custom solution
- CortexServer is available in a desktop version and a 19" rack-mount version

AVUTEK

As a Dutch developer and manufacturer of ANPR sensors and system solutions, AVUTEK's expertise and knowledge have set a benchmark for quality and the best available accuracy. The in-house developed AI hardware and software cooperate seamlessly to provide a maximum accuracy and speed in ANPR or any other Video Content Analysis. From embedded ANPR IoT sensors to a complete computer vision and recognition system, AVUTEK provides nothing but the best, with the highest possible flexibility, all fully remotely managed.

Invitation

The possibilities and inter connectivity of CortexFramework make the platform unique and powerful. AVUTEK is always interested to learn how we can be of service in any video analytics challenge. We invite you to contact our computer vision specialists or sales department to further explore your possibilities.