



### The sky is the limit

Deep learning enhances public safety by generating alarms and events to assist security officers and centralists in their daily routines. Automated Number Plate Recognition increases convenience for customers with a monthly subscription at a car wash, not having to leave their car to get it cleaned. More profoundly it creates tools for cure, care and medical staff to improve healthcare and may prevent accidents from happening. The applicability of machine and deep learning techniques are immense. Hardware and processing power is catching up. It creates a universe of applications in which these techniques can now be implemented. The sky is the limit.

### Artificial intelligence

Creating an intelligent digitized world accessible for businesses, governmental organizations and institutes is what we do at AVUTECH. With our technology, artificial intelligence is added to solutions and sensors. Intelligence that will help in sensing data collection, data filtering, decision making, enhancing security, offering convenience or insights in customer behavior and interests.

### The platform

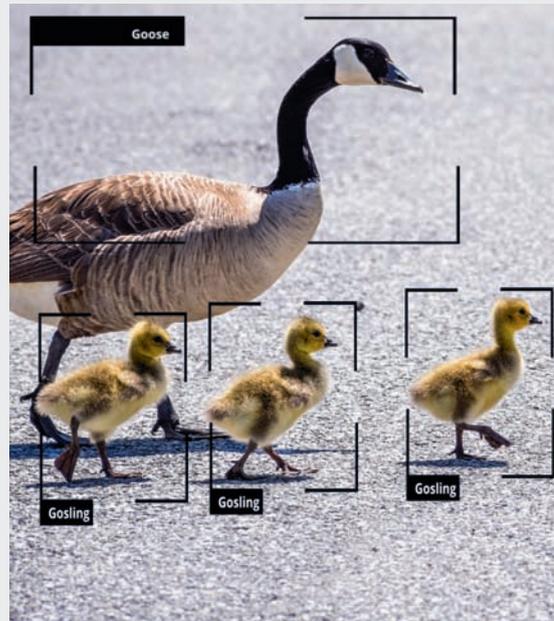
AVUTECH's CortexFramework is a drop-in neural network platform for computer vision applications. The platform analyzes video data in real-time, regardless if it is hosted in the cloud, on a local server or at the edge in a deep learning IoT sensor. Results obtained from detection, tracking or classification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

By taking advantage of groundbreaking computer vision technology, CortexFramework provides extremely accurate and reliable detection, tracking and classification of people and objects. Access to this neural network platform is either provided by an API, SDK or AVUTECH's graphical interface CortexClient. It is flexible, scalable, fully remotely managed and easy to integrate.

### Models

AVUTECH's suite of base models enables detection of common objects like people, vehicles and many more. They can be deployed out of the box. A training process is only required to build tailor-made models, not currently existing on the market, or in our AVUTECH deep learning network library.

AVUTECH utilizes state of the art computer vision networks trained for specific applications and optimized for real time deployment processing at the edge or in the cloud. These models can be trained for generic detection tasks to utterly specific or customized video content analysis.





## CortexDetect

As an illustration of one of our base models [CortexDetect.com](https://CortexDetect.com) is worth a visit. It shows a real time street viewing application. The network is set to detect people, bicycles, cars, trucks and busses. It serves as a sneak preview of all possibilities AVUTEC's AI video processing has to offer.

## The Gatekeeper

Most deep learning models require a vast amount of processing power. AVUTEC rounds the circle to a final and successful deployment. We optimize networks and algorithms to work with miniaturized hardware and have developed an embedded deep learning camera system, incorporating the latest available technology to achieve the best performance.

AVUTEC delivers not only a full-grown Computer Vision platform, our embedded AI camera system completes our portfolio with a highly integrated, edge computing IoT computer vision sensor, the Gatekeeper.

## 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.

## Array of industries

AVUTEC currently offers deep learning solutions across a diverse array of industries:

Retail

An in-store perception of customer activities and interests.

Security and surveillance

To improve security, access, assist security officers and centralists.

Car wash industry

To enhance both convenience and customer in-sight.

Other industries

Which have not yet discovered the power of AVUTEC's computer vision solutions.

## Invitation

AVUTEC 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 to further explore your cost-effective possibilities.

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