



**Real-time video analytics**  
with **predictive alert**  
powered by **artificial intelligence**

# What we do

Ultinuous is an AI-based technology company using deep learning to provide intelligent video analytics. Our technology provides state-of-the-art accuracy along with high-speed processing, making real-time video stream processing a reality. The groundbreaking technology is able to generate unseen analytics, metrics and real-time predictive alerts from live video feeds. The video analytics technology integrated into our solutions is used in a variety of settings and in different industries, such as retail and security. Its main purpose is to gather unique, real-time insights about people as they interact with your institution, company, brand or products.

## **Real-time and Predictive Alerts**

Ultinuous can generate alerts instantly in case of various incidences. If an unwanted person has entered the building, the window is broken or if the POS displays have been placed inappropriately. By using Artificial Intelligence we can even predict an incidence before it actually happens; for instance when more staff is needed at the check-out area because of an influx of customers.

## **Privacy and Data protection**

The platform can anonymize (blur faces and/or full bodies) video streams real-time and make the streams available for live view on any device. It is also possible to store anonymized video streams for historical video playback. An individual's or an object's identity is protected by converting faces and objects into mathematical expressions that are encrypted

and cannot be reversed. This process can be done before storing the videos. In this case, no personal data is stored - extending the possible use cases of the video storage from legal point of view - and helping your company to face the challenges raised by GDPR regulations.

## **Flexibility - using existing infrastructure**

Ultinuous platform can seamlessly integrate with an existing IP camera infrastructure over standard RTSP protocol. The platform processes the video streams real-time and converts the information to structured tabular data. The tabular data can be incorporated into analytic databases and analyzed with BI tools or other analytical tools that you might already use.

# How we do it

We are surrounded by several intelligent video-capturing devices. Embedded in these videos, information, and knowledge awaits to be exploited. Intelligent video analysis is required to filter and process data, to trace moving people and objects, to detect abnormalities and to generate alarms. With recent advances in computer vision and remarkable successes in deep learning techniques, Ultinous now has the ability to mine massive visual data to obtain valuable, real-time insight about what is happening in the world. Our image and video-recognition technology are made easily accessible by a clean API, empowering developers all over the world to build a new generation of intelligent applications.



## Head/face detection

Count people with the highest accuracy possible. We are able to detect even the smallest heads and faces in a video or a picture. Ultinous' counting and tracking technology give the best understanding of your traffic.



## Face recognition and verification

Using deep learning and ultimate image processing technologies, Ultinous solutions learn and identify faces even in a million-face database in real-time. Looking for someone? Ultinous face verification quickly and precisely detects facial features, recognizing faces with 99,6% accuracy.



## Real-time anonymization

Once all the heads have been detected, they can be blurred real-time to hide all personal information. This process can also be done before storing the videos. In this case, no personal data is stored - further extending the possible use options of the video storage from legal point of view.

## Gender and age estimation

With Ultinous technology, you can predict age and gender for frontal-facing people. Collect demographic information on your visitors and determine how long people stay in your store, department or building based on their individual demographic profile!



## Person re-identification

Face-recognition can be used to find the same person in different camera views at different times – even if the face of the person is not always visible.



## Tracking

Ultinous technology can detect and track multiple faces and their movement over time in a video stream. Map your dominant traffic paths and create your visitor heatmap!





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**How can we help?**  
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