

Aventior announces partnership with Aspectum

Aspectum has signed a contract of cooperation with **Aventior** to improve its Change Detection and Object Detection capabilities.

Aspectum will utilize Aventior's processing algorithms to develop its data analytics and improve the in-house Aspectum machine learning model. With the help of these technologies, Aspectum will be able to conduct object detection operations such as data collection, processing, and visualization.

Aventior's technology is powered by a **Neural Network** capable of classifying the differences between two images by comparing pixel combinations. It builds a map, where each pixel represents a "neuron," and models the spatial context of these pixels in order to spot the correlations between them. Simply put, the network distinguishes trees from buildings, and buildings from roads.

Specifically, **Aspectum will be using** algorithms for Change Detection, Car Detection, Building Detection, and Vessel Detection. This means Aspectum will be able to help businesses and non-profit organizations alike to take advantage of spatial intelligence and satellite imagery on a fundamentally different scale.

Aspectum clients will have access to a tool able to automatically collect and analyze object data and hence, track changes for urban, suburban, rural, and maritime areas. The maximum territory coverage has also been extended exponentially compared to previous software versions, while setting validation accuracy near 95%.

This new machine learning algorithm is **best suited for** the following sectors:

- Infrastructural planning and renovation projects (building detection, traffic hubs workload estimation, violations tracking)
- Oil & Gas production industry (estimate oil production based on a number of oil storages, pipelines, supply chains analysis, and working oil wells)
- Transportation management (route planning, load estimation)
- Marketing research (parking lot load, location intelligence)

About Aventior

Aventior specializes in data science, [computer vision](#), data analytics, and cloud engineering business-to-business solutions.

About Aspectum

Aspectum is a California-based company focused on providing high-quality visualization and powerful analytics for business outcomes. It offers digital solutions for improved data visualization through geographic information systems. Aspectum partners with leading companies across industries in North America and Europe for enhanced mapping that makes data more available and valuable.