

KML VISION - Press Release

Artificial Intelligence accelerates Automated Image Analysis

KML VISION revolutionizes automated analysis of big image data. With the online platform IKOSA[®], which is based on artificial Intelligence, companies from life science and industry can perform visual analysis faster, more precise, and in a more reproducible manner than ever before.

Visual inspections are commonly used in life science (e.g. biomedical sciences, pharmacology, etc.), healthcare and in the industry for various tasks in research & development, quality control and assurance. The routine examination of numerous samples plays an important role in these processes. Frequently, extremely small structures like cells, bacteria, defects, or similar to these, have to be investigated through a microscope. At high resolution, this produces huge digital images, but observing objects over time may produce a lot of images as well. Due to the great variance of objects, these images can get very complex and require domain expertise to be analyzed. Human experts have to examine these images manually in order to find altered structures or count specific objects. The required expertise as well as the repetitive, complex tasks often results in long processing times and limited scalability. In addition, tedious work and subjective evaluation leads to flawed reproducibility. Although digital images are often already present due to ongoing digitization in many organizations, there was no efficient automated analysis available. To provide a solution to this problem, KML VISION is now developing the IKOSA[®] online platform. IKOSA[®] enables a fast, precise and reproducible image analysis. Furthermore, the platform provides simple management, viewing, and processing of arbitrarily sized images in a multi-user system.

IKOSA[®] - The Platform for Automated Image Analysis

Through the IKOSA[®] platform, the team of KML Vision provides their customers a modern and efficient tool for fast, reproducible and cost-efficient image analysis. The platform enables simultaneous and collaborative management, viewing, annotation and evaluation of images of any size. The versatile analysis applications are based on Deep Learning, the newest and very promising developments in the field of artificial intelligence and machine learning. For instance, applications comprise object recognition, categorization, or measurements. IKOSA[®] services are charged for on-demand, i.e. the customers pay per analyzed image. In order to be smoothly integrable into the value chain of customers, the platform provides a flexible interface (API) to simplify the integration into third-party products. In this way, they can increase in attractiveness for their existing and potential future customers. The combination of the technologies, as well as the business model of KML Vision itself, represents a brand-new approach in the field of life sciences and grants access to new technology to a great bandwidth of customers. Depending on customer requirements, IKOSA[®] can be used online as on-demand Software-as-a-Service, or be licensed for on-site operation.

KML Vision GmbH was founded by Dr. Philipp Kainz und DDr. Michael Mayrhofer-Reinhartshuber in August 2018 and is based in Graz, Austria. Its customers include companies from the field of medical technology, biotechnology and environmental sciences, as well as corporate and academic research institutions. Starting as an OG, the team was working on individual software projects since 2016. In the first phase, the company was supported by the High-Tech Incubator Science Park Graz. In October 2018, the Styrian Business Development Agency SFG became co-shareholder due to an investment through their Venture Capital Program.



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