**Machine vision now even faster and more robust:**

**MVTec presents HALCON 19.05**

* **Many new and optimized features**
* **Continued focus on deep learning**
* **Release date: May 31, 2019**

**Munich, April 15, 2019** – MVTec Software GmbH ([www.mvtec.com](http://www.mvtec.com/)), the leading provider of modern machine vision software, announces that May 31, 2019 will be the release date of the new version 19.05 of its standard software, HALCON. This release will further improve machine vision processes with a number of new and revised features. In particular, the expert team at MVTec has enhanced the deep learning technologies available in HALCON. One highlight: In version 19.05, the deep learning inference can also be executed on CPUs with the established Arm® processor architecture. This allows customers to use the latest deep learning technologies on standard embedded devices. Deep-learning-based object detection has also been improved: The method, which locates and identifies objects by their surrounding rectangles (so-called bounding boxes) now precisely detects the orientation of the objects.

**Significant improvements in 2D and 3D matching**

Other new features in HALCON 19.05 optimize matching processes. For example, users of HALCON’s shape-based matching can now define areas within a search model that should \*not\* contain any contours. In the context of repetitive structures, this leads to more robust matching results.

Moreover, the new HALCON release also offers several enhancements for surface-based 3D matching. This means that additional parameters can be used to better inspect the quality of 3D edges, resulting in even more robust matching – especially in the case of noisy 3D data.

**Optimized usability in embedded environments**

“With version 19.05, we are raising our proven HALCON standard machine vision software to a new level. Developers and users alike benefit from numerous new features. These not only include additional, well-thought-out deep learning functions, but also noticeably improved usability in embedded environments,” explains Johannes Hiltner, HALCON Product Manager at MVTec.

**About MVTec**

MVTec is a leading manufacturer of standard software for machine vision. MVTec products are used in all demanding areas of imaging: Semi-conductor industry, web inspection, quality control and inspection applications in general, medicine, 3D vision, and surveillance. MVTec, with its head office in Munich (Germany), has more than 30 established distributors worldwide and in addition, MVTec, LLC works out of Boston, MA (USA). [www.mvtec.com](http://www.mvtec.com)

**About MVTec HALCON**

MVTec HALCON is the comprehensive standard software for machine vision with an integrateddevelopment environment (HDevelop) that is used worldwide. It enables cost savings and improved time to market. HALCON’s flexible architecture facilitates rapid development of any kind of machine vision application. MVTec HALCON provides outstanding performance and a comprehensive support of multi-core platforms, special instruction sets like AVX2 and NEON, as well as GPU acceleration. It serves all industries, with a library used in hundreds of thousands of installations in all areas of imaging like blob analysis, morphology, matching, measuring, and identification. The software provides the latest state-of-the-art machine vision technologies, such as comprehensive 3D vision and deep learning algorithms.

The software secures your investment by supporting a wide range of operating systems and providing interfaces to hundreds of industrial cameras and frame grabbers, in particular by supporting standards like GenICam, GigE Vision, and USB3 Vision. By default, MVTec HALCON runs on Arm®-based smart cameras and other embedded vision platforms. It can also be ported to various microprocessors/DSPs, operating systems, and compilers. Thus, the software is ideally suited for the use within embedded systems.

[www.halcon.com](http://www.halcon.com), [www.embedded-vision-software.com](http://www.embedded-vision-software.com)

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