Initiative Launched to Create Open Standard for Computer Vision

The Khronos Group today announced a new initiative to create an open, royalty-free standard for cross platform acceleration of computer vision applications. In response to requests and proposals from members, Khronos has created a vision working group to develop a hardware acceleration API using the proven Khronos development process and aiming for a first public release within 12 months. Any interested company is welcome to join Khronos to make contributions, influence the direction of the specification and gain early access to draft specifications before public release. The vision working group will commence work during January 2012. More details on joining Khronos can be found at http://khronos.us2.list-manage1.com/track/click?u=4486df88f5b87070bfeac5a4f&id=27fc3b3da0&e=2cbcf0825c [1] or emailing {encode=info@khronos.org} [2].

Computer vision has become an essential component of many modern applications including gesture tracking, smart video surveillance, automatic driver assistance, biometrics, computational photography, augmented reality, visual inspection, robotics and more. Many modern consumer compute devices, from smartphones to desktop computers, can be capable computer vision systems but require hardware accelerated vision algorithms to work in real-time. Consequently, multiple hardware vendors have developed proprietary accelerated computer vision libraries leading to market fragmentation. The Khronos vision working group will drive industry consensus to create a cross-platform API standard to enable hardware vendors to implement and optimize accelerated computer vision algorithms. More details on the vision working group processes and goals are here: http://khronos.us2.list-manage.com/track/click?u=4486df88f5b87070bfeac5a4f&id=abae110f66&e=2cbcf0825c [3].

The Khronos vision API will be able to accelerate high-level libraries, such as the popular OpenCV open source vision library, or be used by applications directly. A strong focus of the working group will be on providing computer vision on mobile and embedded systems and enabling acceleration on a wide variety of computing architectures including CPUs, GPUs and DSPs. The vision API will also explore interoperability with existing Khronos standards for camera control, video processing, compute acceleration and graphics rendering.

“Computer vision will be central to enabling consumers to use and interact with their computing devices in compelling and magical ways - but this emerging market opportunity needs a firm foundation of cross-platform vision acceleration,” said Neil Trevett, president of the Khronos Group. “We invite any company with an interest or expertise in vision processing to join us to help build a lasting standard that can be broadly adopted across multiple devices and market segments.”

More information is available at www.khronos.org [4].

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