Intel's Perceptual Computing marks neo-desktop era

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(Phys.org)—Intel wants you to know that voice, face and gesture control will become a familiar feature in computers. The time for a new kind of notebook world is now, for Intel, and computing facets including touch, voice, and visual are seated under Intel's umbrella term, Perceptual Computing. Intel is promoting this idea as the way people will interact with their computers, and the accent is on the word interact. The keyboard and mouse retreat in the background yielding to gestures and face and speech recognition.

The Intel shift that the company wants to effect sooner than later strengthens the role of the interface. The Perceptual-Computing model makes use of voice and face recognition which could replace passwords for user authentication; gesture recognition would be another important feature especially fit for gaming and educational activities.

Kirk Skaugen, Intel vice president and general manager of the PC Client Group, recently elaborated on the concept of Perceptual Computing for an audience at the Consumer Electronics Show.

The idea and implementation are not in the so-distant future and Intel wants to get this platform going. Intel is offering developers a Perceptual Computing SDK in beta.

As a voice recognition partner, Nuance is partnering with Intel for advanced voice recognition with support for nine languages in 27 countries.

Built-in features will include voice assistance for posting news and updates to social networking sites, searching Wikipedia, and controlling video games.

The $150 3-D camera peripheral, through an Intel partnership with Creative, will be able to sense gestures from between six to 36 inches. The camera will go on sale some time this year but developers are invited to buy it on the website. Intel is encouraging developers to buy the Creative Interactive Gesture Camera Developer Kit. This refers to a depth-sensor camera for use with the kit for object-tracking.

Facial recognition, which Intel is using as part of its plan, is being promoted as a tool for computer security within this vision of Perceptual Computing. Intel believes the capability will enable stronger passwords. The facial recognition component will be able to detect multiple

muscular points on a person's face, lessening the risk of unauthorized access via attempts to get in via a photo or video.

Meanwhile, Intel is actively reaching out to enterprising developers who will be key in driving the adoption of this platform. Intel anticipates developers will want to show their coding skills and let their imaginations fly. Intel's free Perceptual Computing SDK, in all, will allow developers to work with facial analysis, speech recognition, hand and finger tracking, and 2-D/3-D object tracking on Intel's Ultrabooks.

As sources of inspiration, Intel is offering developers a "showcase" of applications created using the SDK. Examples include a rhythm action game for gesture technology platforms. Last month, Intel announced another motivator, the Perceptual Computing Challenge, with cash prizes, as a developer contest running throughout 2013. The Challenge is promoting development of gaming, productivity, multimodal, and creative UI applications using the Intel Perceptual Computing SDK and Creative Interactive Gesture Camera.

More information: software.intel.com/en-us/vcsou … eptual-computing-sdk