

Intel® RealSense™ Technology at Intel Developer Forum 2015

Developers Unveil New Applications Based on Intel RealSense Technology

Aug. 18, 2015 — During his opening address at the Intel Developer Forum (IDF), CEO Brian Krzanich talked about how “sensification” of computing is emerging as the next frontier of compute innovation. He unveiled a number of updates to Intel® RealSense™ technology that will bring depth sensing to more platforms and devices. He also showed live demos on stage to introduce new hardware and software applications based on Intel RealSense technology.

Intel RealSense Smartphone Featuring Google's Project Tango

In collaboration with Google*, Intel is driving innovation in mobile depth sensing by combining Project Tango* and Intel RealSense technologies into an Android* Smartphone developer kit that was demonstrated at IDF. The Intel RealSense Smartphone featuring Google's Project Tango enables new experiences including indoor navigation and area learning, virtual reality gaming, 3D scanning and more. The Intel RealSense developer kits supporting Project Tango are targeted to reach select Android developers by the end of this year.

Expanding Intel RealSense Technology to Additional Platforms

Intel RealSense technology is opening up more opportunities for developers to create new depth sensing hardware and software. In addition to Windows* and Android*, developers will be able to use Intel RealSense technology with Mac OS X*, ROS*, Linux*, Scratch*, Unity*, XSplit*, OBS*, Structure SDK*, OSVR*, Unreal Engine 4 (UE4)* and Google's Project Tango*. These developer capabilities enable new industry solutions beyond the PC, extending to robotics, drones, vending machines, “magic mirrors” and many other new exciting devices.

- Intel showed an early prototype of the Intel RealSense Camera interface for **Mac OS X** that will provide developers with access to the camera's raw depth data. The prototype was demonstrated at the Intel RealSense pavilion at IDF and will be available at www.intel.com/RealSense/experimental at a later date.
- The **Robot Operating System (ROS)** will support Intel RealSense technology capabilities. The interface with access to the camera's raw depth data is expected to be available from ros.org and www.intel.com/RealSense/experimental later this year. A live demonstration of ROS supporting Intel RealSense technology was shown at the Intel RealSense pavilion at IDF.
- The Intel RealSense Camera interface for **Linux** will provide developers with access to the camera's raw depth data. The interface is expected to be available from www.intel.com/RealSense/experimental later this year. A live demonstration of Intel RealSense Camera interface for Linux was shown at the Intel RealSense pavilion at IDF.
- The Intel RealSense extension for **Scratch** is now available from www.intel.com/RealSense/scratch. Scratch is a free programming language developed at the MIT Media Lab and used by more than 7 million young people to create their own interactive stories, games, and animations. The Intel RealSense extension for Scratch allows users to integrate new and amazing depth-sensing capabilities into their Scratch projects.

- The Intel RealSense SDK for Windows features a **Unity** toolkit, providing developers seamless access to depth sensing capabilities from within the Unity development platform. The SDK can be downloaded today from www.intel.com/RealSense/SDK.
- Intel and Occipital* have started collaboration to expand **Structure SDK** to Intel RealSense devices. More details are expected later this year. Structure SDK, which has been available to developers since 2013, works together with the Structure Sensor* peripheral to enable rich 3D scanning and interaction on iOS* devices.
- The **UE4** community is already distributing an event-driven plugin for the Intel RealSense Camera, an example of which is linked from <https://github.com/getnamo/realsense-ue4>.
- The Intel RealSense Camera will be enabled for **OSVR** developer platforms and head-mounted displays.

New Solutions from Developers

A number of developers announced new solutions based on Intel RealSense technology.

- Razer* is working with Intel to deliver an Intel RealSense Camera peripheral for gamers. The peripheral is a small, light-weight, USB-powered camera optimized for close-range interactivity with a depth sensor for enhanced game broadcasting and virtual reality (VR) gaming capabilities. Gamers can easily mount the peripheral on different machines such as desktop computers and VR headsets. It offers an ideal solution for OSVR developers. The product is scheduled for the first quarter of 2016.
- The two leading streaming solutions for Twitch* streamers -- XSplit* Gamecaster and OBS* multiplatform, will feature Intel RealSense technology directly from their apps. XSplit Gamecaster with native integration of the technology will be available by the end of this year. Instead of requiring a physical green screen, gamers will be able to remove their background real-time with Intel RealSense technology when streaming to Twitch*, a video platform and community for gamers that has attracted more than 100 million live viewers in a month. Intel will also be the lead sponsor for the inaugural TwitchCon 2015* in San Francisco this September.
- Relay, a robot butler from Savioke*, has incorporated the Intel RealSense Camera. Relay is a state-of-the-art robot designed for autonomous delivery of items between people. His first application is in the hospitality industry, already delivering items and delighting guests at Starwood* and InterContinental Group* hotels. At IDF, the robot delivered a beverage to Krzanich during his keynote address. Attendees at IDF also have the opportunity to see a fleet of Relay robots during the course of the Intel Developer Forum. Relay featuring Intel RealSense Cameras will be available next year.

Demos Showing Upcoming Opportunities for Intel RealSense Technology

- Combining ultra-realistic driving simulator iRacing* with one of the world's most advanced hardware simulators from VRX, Intel demonstrated a highly immersive gaming platform using Intel RealSense technology-based head tracking and running on the upcoming 6th Generation Intel® Core™ processor. Attendees were able to try the multi-sensory simulation first hand at the Intel RealSense pavilion. The head-tracking functionality was enabled by a plugin for opentrack*, a

tracking platform that supports over 500 gaming titles and now enables Intel RealSense Camera users to navigate their driving and flight simulators with real-time head tracking. The plug-in will be made available for gamers later this year.

- During his keynote, Krzanich demonstrated an evolved version of a “floating display” product that he first introduced earlier this year at CES. This pseudo-holographic interactive display now features haptic feedback for a more immersive user experience. The product was demonstrated at the Intel RealSense pavilion.
- Ending Krzanich’s opening keynote was a clutter of mechanical robot spiders, including a giant “mother” spider that featured an Intel RealSense Camera as “eyes”, giving the spider the ability to sense depth.

Intel, Intel RealSense, Intel Core and the Intel logo are trademarks of Intel Corporation in the United States and other countries.

*Other names and brands may be claimed as the property of others.

CONTACTS:	Agnes Kwan	Scott Massey
	+1 408 398 2573	+1 503 332 6382
	agnes.ck.kwan@intel.com	scott.massey@intel.com