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Velodyne LiDAR Teams with MVP Interactive on Quarterback Challenge — A Solution for Every Peyton Manning Wannabe

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Just Ahead of Super Bowl 50 in Santa Clara, Innovative Simulation Uses 3D Real-Time VLP-16 LiDAR Puck to Boost Passing Accuracy

Bringing its popular LiDAR technology into an entirely new field of play, [Velodyne](#) LiDAR announced today that it has teamed with specialty solution provider [MVP Interactive](#) on a breakthrough virtual quarterback simulation.

Velodyne LiDAR is the leading developer, manufacturer and supplier of real-time LiDAR sensor technology used in a variety of commercial applications including autonomous vehicles, vehicle safety systems, 3D mobile mapping, 3D aerial mapping and security. Based in Philadelphia, MVP Interactive creates innovative interactive experiences, implementing engaging technical solutions to complex problems.

As part of the nationwide Salute to Service tour (<http://salutetoservice.com/>), insurance giant USAA — Official Military Appreciation Sponsor of the NFL — enlisted MVP to generate the Quarterback Challenge, which operates much like a golf simulator. From a distance of eight to ten feet, players view a large screen that displays scenes from a quarterback's point of view. The goal is to throw as many footballs as possible, as accurately as possible, in the shortest period of time, according to the scene displayed on screen. Quarterback Challenge debuted during the Army-Navy game on Dec. 12 in Philadelphia, which Navy won 21-17.

For Quarterback Challenge to work, the direction of the football, its trajectory and its velocity need to be calculated very rapidly, which is where Velodyne's VLP-16 LiDAR Puck comes into play. MVP tried a variety of sensors before selecting the VLP-16, but only Velodyne's LiDAR sensor provided the company with exactly the capabilities it was seeking.

"The Velodyne VLP-16 was by far the most cost-effective sensor we considered, and combined with our detection algorithm, proved to overcome a number of large technical hurdles," said Anthony DiPrizio, CTO, MVP Interactive. "While the application might seem straightforward to build, it wasn't. What the VLP-16 sensor and our software were able to achieve represents a tremendous technical feat. We plan to use the Velodyne sensor in several projects going forward, given the success of the Quarterback Challenge."

"The technical issues involved in creating Quarterback Challenge were substantial," said David Oroshnik, Velodyne Director of Technical Solutions. "Accuracy, lighting conditions, non-controlled environments, speed of objects being thrown, number of points of detection needed, etc. — all became non-issues for our sensor. Think of it — the same company that provides next-generation LiDAR sensors for Ford's self-driving cars now offers technology that's fast and accurate enough to capture a football's trajectory in fractions of a second, in real-time 3D, for MVP's Quarterback Challenge. Beyond this football-themed solution, the simulator bodes well for an entire range of applications that can benefit from real-time multi-channel LiDAR technology."

About MVP Interactive

MVP Interactive, headquartered in Philadelphia, is a consumer engagement software and technology company that specializes in creating unique and interactive in-venue experiences for audiences while at the same time enabling brands to more deeply connect and engage consumers. MVP's core in-venue products are its patented MorphingStations and Gaming Wall. MVP also provides customized technology offerings such as virtual reality experiences, and direct fan marketing services enabling teams to engage and stay connected to season ticket holders.

MVP Interactive is financially backed by Seven Crowns USA and Increscent Capital and has received commitments from Ben Franklin Technology Partners of Southeastern Pennsylvania. For more information, please visit www.mvp-interactive.com.

About Velodyne LiDAR

Founded in 1983 and based in California's Silicon Valley, Velodyne LiDAR Inc. is a technology company known worldwide for its real-time LiDAR (light detection and ranging) sensors. The company evolved after founder/inventor David Hall competed in the 2004-05 DARPA Grand Challenge using stereovision technology. Based on his experience during this challenge, Hall recognized the limitations of stereovision and developed the HDL-64 Solid-State Hybrid LiDAR sensor. Velodyne subsequently released its compact, lightweight HDL-32E sensor, available for many applications including UAVs, and the new VLP-16 LiDAR Puck, a 16-channel real-time LiDAR sensor that is both substantially smaller and dramatically less expensive than previous generation sensors. Market research firm Frost & Sullivan has honored the company and the VLP-16 with its 2015 North American Automotive ADAS (Advanced Driver Assistance System) Sensors Product Leadership Award. Since 2007, Velodyne LiDAR has emerged as the leading developer, manufacturer and supplier of real-time LiDAR sensor technology used in a variety of commercial applications including autonomous vehicles, vehicle safety systems, 3D mobile mapping, 3D aerial mapping and security. For more information, visit www.velodynelidar.com. For the latest information on new products and to receive Velodyne's newsletter, [register here](#).

Contact Information



Velodyne

<http://www.velodynelidar.com/lidar/lidar.aspx>

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