

## **Tyxx Captures \$4M To Give Machines Eyesight**

By Jonathan Shieber, Dow Jones *VentureWire*

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Menlo Park, Calif. -- Imagine a car that can "see" the location of its passengers in three-dimensions and can use that vision to deploy airbags most effectively. Or, imagine a car that can help prevent accidents by visualizing the location of pedestrians and other vehicles and then automatically engaging a car's brakes if it's too close.

Charged with turning those technologies into a reality, Tyxx Inc., a developer of three-dimensional visualization technologies, has raised \$4 million from the Takata Group, a Japanese manufacturer of automotive safety systems.

The investment will support research and development of these automotive applications, according to Tyxx Chief Executive Ron Buck. "The only place that computer vision has been used is in the manufacturing environment," Buck said. "We want to take this technology out into the real world."

Founded in 2001, with a seed investment from Microsoft co-founder Paul Allen, Tyxx is based on research conducted at Allen's Interval Research Corp. It was at Interval in the mid-to late 1990s that Tyxx co-founders John Woodfill and Gaile Gordon performed their research on stereovision and computer vision systems.

That research formed the base of Tyxx's technology platform, comprised of hardware and software that is licensed to companies to develop unique three-dimensional applications. So far, the company is using its chipsets and software across a range of applications including security systems, customer tracking for retailers, and robotics.

"Our primary interests have always been the person-tracking, robotics, and automotive opportunities," Buck said. "We've been marketing a vision application development platform that provides the development tools for customers."

The company's "platform" is based on a specially designed chip that handles the stereoscopic correlation of images and software that processes the images. Currently, revenue for Tyzx are split between licensing deals for its platform technology and consulting services on the back-end of its sales.

Based in Menlo Park, Calif., Tyzx also has hardware development facilities in Beaverton, Ore. Buck would not disclose details of the company's financials but said Tyzx "has been a profitable company.

"Success, Buck said, depends on Tyzx being able to build out the scale of its chipset manufacturing. "What we're really trying to do is get the product costs down," he said, which depends on the volume purchasing Buck expects from the Takata deal.

"The world's best but most expensive robot is not an interesting innovation," Buck said. "We need a certain degree of market awareness, that real-time 3-D technology is affordable in our lifetime."