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Greetings!

In honor of our 20th Anniversary, Patti Engineering is reviving our newsletter the **Patti Perspective**.

Allow me to introduce myself. My name is Georgia Whalen and I am the Director of Marketing here at Patti Engineering, with the assistance of our management team and talented engineers, I will be coordinating the delivery of the **Patti Perspective**.

The **Patti Perspective** is a monthly newsletter featuring articles covering system integration and useful business topics. We are going back to our robotic roots with our topic for this month. Dave Foster, our VP of Engineering found a very interesting article written by industry analyst and commentator, Jim Pinto. We will be sharing this article with you in the next section.

As many of you may know, Patti Engineering has evolved from one man (Sam Hoff) and his laptop to become a thriving business with an international scope serving as a trusted advisor to clients, providing electrical control system design, hardware, software, and installation for various automation projects at manufacturing plants and distribution centers.

Fanuc Robotics was Patti Engineering's first client thanks to Don Kijek of Fanuc who gave Sam his first big break. Fanuc is still an important Patti Engineering client today. With this in mind, robotics seemed to be a great topic for the first issue of our revived newsletter. We hope you will enjoy it as much as we have.

Thank you for your interest in Patti Engineering. Cheers to the next 20 years as we strive to embrace and drive innovation in the automation industry with our dedicated team of professional problem solving engineers, our loyal customers and our trusted partners!

Best regards,

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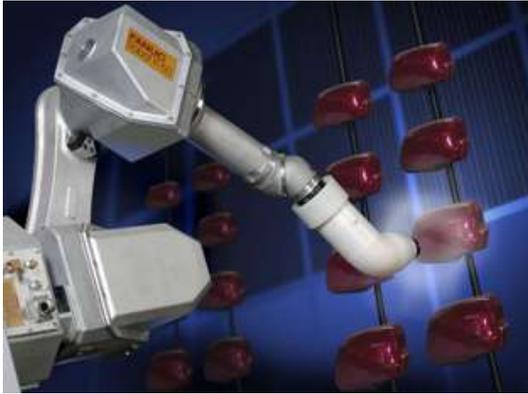
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KINECT REVOLUTIONIZES ROBOTICS



This article was written by Jim Pinto. Jim Pinto is an industry analyst and commentator, writer, technology futurist and angel investor. You can e-mail him at: jim@jimpinto.com. Or review his prognostications and predictions on his Web site: www.jimpinto.com.

For decades, robotics had a fundamental problem: A moving robot must be able to create a map of its environment. The tools for this are known as simultaneous localization and mapping. But the sensors required to have any reasonable accuracy were expensive and bulky, and required massive computing power.

Then Microsoft released the Kinect, a \$150 add-on for Xbox 360 that allows players to direct the action in a game simply by moving their bodies. While most people were fascinated by the controller-free interface, roboticists saw something else entirely: an affordable, lightweight camera that could capture 3-D images in real time.

Within weeks of the device's release, YouTube was filled with videos of Kinect-enabled robots. When something is that cheap, it opens up all sorts of possibilities. Now just about anybody can play with robots that have revolutionary functionality.

Microsoft's official response to all this "hacker" activity has gone from hostility to acceptance to vigorous support. They are just about to release a software development kit that makes it easier for anyone to build Windows applications using the Kinect's camera and microphones.

Microsoft is also granting access to the high-powered algorithms that help the machine to recognize individual bodies and track motion, unleashing the kind of power that was previously available with expensive, high-power computers in top-class laboratories. Microsoft is working on a commercial version of its software development kit that will allow entire new businesses to startup using the Kinect's technology.

When Do-it-yourselfers combine those cheap, powerful tools with the collaborative potential of the Internet, they can come up with the kinds of innovations that once came only from big-budget R&D labs. For \$150, the Kinect includes some high-powered hardware.

But until now, no company has made it so easy to hack into a product as popular as the Kinect, the fastest-selling consumer-tech product of all time. The Kinect racked up 10 million sales in just four months. That means 10 million people now have fully functioning depth cameras (which measure the distance between the Kinect and objects in front of it) sitting in their living rooms.

Microsoft is giving everybody the tools, and its blessing, to build new applications. "We're trying to usher in a new era of computers, a world of tomorrow" says Xbox general manager of incubation Alex Kipman. He adds that the Kinect's gesture-based interface is an early example of how we will soon interact with all of our computers and appliances.

Now that the drivers were public, every day seemed to bring an exciting new innovation. Everyone is now playing with Kinect and xBox. Watch for major advances and inflection points in robotics technology to emerge with dazzling speed.

[Kinect Hackers Are Changing the Future of Robotics](#)

[Video: Control the Humanoid Robot by Kinect](#)

[Kinect's Greatest Hack: A Gesture-Control Robot](#)

**** *For more information on Patti Engineering's expertise with robotics please visit our [website!](#)*

Patti Personnel - Rick Schoonover

Rick Shoonover serves as Patti Engineering's Business Development Director. Rick is responsible for leading the company's efforts in growing national market share within the automation industry. Schoonover has more than 20 years of experience in the controls system integration industry. Prior



to joining Patti Engineering, Schoonover held key positions at Modicon PLC, ABB & KUKA Robotics and Flow Robotic Software Technologies.

Schoonover earned his Bachelor of Science degree in Mechanical Engineering from the University of Illinois and his MBA at the University of Michigan.

Patti Engineering Racing?

Patti Engineering encourages out-of-the box thinking. Recently Business Development Director, Rick Schoonover approached Patti Engineering President Sam Hoff about sponsoring his SCCA SN/ITA Dodge race car. Hoping to put a new twist on the "Race on Sunday, sell on Monday" approach that Detroit was known for; Rick plans to gain additional exposure for Patti Engineering through car racing. The recently painted (on Sam's dime) Golf Oil livery Dodge will soon proudly wear the Patti Engineering logo. Pictured above, Rick (far right) and his team, Jim Schmid of Navistar (far left), and Jeff Herr of Force Protection (middle), campaigned the car June 25 and 26 at Waterford Hills Raceway in Clarkston, MI. Rick plans to park the eye-catching car periodically in front of Patti Engineering's world headquarters in Auburn Hills, MI when he's not out racing or instructing high-performance driver's education in the blue and orange car. Team Patti Engineering's next Waterford Hills appearance is scheduled for August 27 & 28.

