Tom Wagner | *CEO, Berkshire Grey*

Automating with Intelligent robots

Berkshire Grey, a US-based technology company, builds solutions that combine Artificial Intelligence and Robotics to automate retail, eCommerce, and logistics processes. The company has remained a forerunner in transforming pick, pack, and sort operations, thus, transforming the dynamic distribution and fulfillment centers of logistics and retail enterprises. According to the company, it uses machine learning and AI technology to control industrial robots that can automate tasks that have never before been performed by machines in commercial settings. In an interview, Tom Wagner CEO of the company, ponders over AI's future, the company's vision, and the success mantra behind Berkshire Grey.

Ask Tom about how AI has changed the entire gamut of the IT industry and he says, "AI is changing the way the whole world does business. Today, often the term AI is used to denote learning algorithms that examine data and help to automate decision making. This can improve the operation of one's computer software or even help insurance companies to identify cases that need to be examined. That is just the beginning. There is so much more ahead."

The History

On the conceptualization of Berkshire Grey and the game-changing AI-enabled solutions, Tom says that the company identifies opportunities to help retail, eCommerce, and logistics enterprises serve their customers in better ways, while simultaneously improving internal efficiencies in supply chain operations. "How we use AI at Berkshire Grey is more comprehensive and holistic than just decision- making augmentation. At Berkshire Grey, our AI enables robots to handle individual items or 'eaches', to fill eCommerce orders, fill resupply orders for retail stores, and sort packages for logistics operations" he adds.

Notes Tom that a BG robot has a lot on its mind and in its hands while completing a task. "A BG robot must look at piles of inventory or packages presented chaotically to the robot in a bin, tote, or conveyor belt. It then needs to figure out where one item stops and another one starts, recognize the items, learn how to grasp the item it wants, make a plan to move itself to get the item, decide where to place the item, and eventually pick and place it into the prescribed order box or container. The robots must execute all of these things in just seconds and repeat the actions continuously for hours." The company's AI is a large system comprised of many AI subsystems – there are multiple systems for recognizing objects and understanding the world via sensors, adds Tom.

Challenges Galore

Stressing the need for systems to constantly work in a performant fashion out of the box, Tom maintains that for AI systems, that rely heavily on machine learning, a wait-for-performance scenario isn't tolerated by customers. "At Berkshire Grey, we use various proprietary AI approaches that enable our system to hit key customer metrics and rates when first deployed and then the systems improve even more over time as they work and learn."

Success Mantra

Berkshire Grey is a highly technical company and technology can be very exciting in and of itself. "To establish a culture of driving for success, we combine our passion for technology with a passion for our customer and passion for having a measurable and meaningful impact with our technology. There is nothing better in the world than having a customer want your leading-edge technology because it has a very real and very positive impact on their business" notes Tom.

The Vision

Berkshire Grey is building highly differentiated solutions with robots and artificial intelligence. "We are solidly focused today on the verticals of eCommerce, retail, and package handling or logistics. In the future, we will turn to the many adjacencies – with robots that pick-up items in unstructured settings, the sky is the limit in terms of opportunities to make the world a better place via automation that supports people in the industry, the office, and eventually home settings" signs off Tom.