April 2018 ENewsletter

**Roboticists**

One area of technological focus in the twenty-first century is using robots to do work that is either tedious for, or dangerous to humans. Like every other field of endeavor, women are involved in developing, refining, and improving robots. In this month’s enewsletter we feature two female roboticists: Ayanna Howard and Helen Greiner.

Professor **Ayanna Howard**, the current Chair of the School of Interactive Computing at Georgia Tech, has focused on robots in addition to her work on artificial intelligence and computer vision. Her robotic work ranges from assistive robots to healthcare robots to the use of robots in extreme environments. After receiving her PhD in electrical engineering, Dr. Howard spent her early career years at the Jet Propulsion Laboratory. Among her many award-wining accomplishments, she developed the SnoMote robots, which were used to gauge the effect of global climate change on the ice in Antarctica. She has been featured in *Time* Magazine, *USA Today,* was named by the Massachusetts Institute of Technology (MIT) *Technology Review* as a top young innovator, and called one of the 23 most powerful women engineers by *Business Insider*.

Her spin-off company, Zyrobotics, develops educational technologies for children, targeting 3-7 year olds and focusing on a range of inclusive and diverse products that adapt to each child’s capabilities. Dr. Howard says: “I believe that every engineer has the responsibility to make the world a better place. We are gifted with an amazing power to take people’s wishes and make them a reality.”

Mechanical engineer **Helen Greiner** co-founded the robotics firm iRobot. She went to MIT to study robotics, but found she had to learn a lot independently. iRobot was founded in 1990 by Greiner and two colleagues. iRobot’s first commercial product was *My Real Baby*, an interactive robotic baby doll sold by Hasbro. *My Real Baby* had sensors and programming that responded when kids played with her; it laughed when they tickled her and burped when they patted her back.

Called the epitome of “let your robot do the dirty work”, the Roomba is a vacuuming robot, released commercially by iRobot in 2002. It has sold over 16 million units worldwide. The Roomba was followed by the Scooba, a scrubbing robot. iRobot also makes products for military and industrial clients. The PackBot identified and disposed of bombs in Iraq and Afghanistan; over 6,000 units have shipped. The PackBot was also used the day after 9/11 to search for survivors in neighboring buildings.

Greiner is now working on drones for applications in public safety, construction and agriculture, as well as for military markets through the company she founded in 2008, CyPhyWorks. She says that R2-D2 from the original Star Wars movie was her robotic muse; developing the robots has taken years of experimentation.

Ayanna Howard and Helen Greiner are among the more than 850 women profiled in our book *Her Story: A Timeline of the Women Who Changed America*. Women’s accomplishments continue to inspire and encourage us. Help us to tell women’s stories!