



tech force profile

NAME :: Deanne “Dee” Symonds

POSITION :: Senior Scientist, Research & Development, Trex Enterprises Corporation, Maui

AGE :: 29

ETC. :: Writing a collection of short stories and poetry; surfing and fishing; and volunteering as advisor to intermediate schools’ Science Clubs on underwater robotics and environmental stewardship.

From Maui to Massachusetts to the Middle East, Dee Symonds’ career path has been a worldly journey. The Kahului native credits Maui High School teacher Ed Ginoza with sending her to an MIT summer program where, as part of a 3-person team, she helped design and build a robot that won top honors. She decided to stay at the renowned Cambridge, Massachusetts university’s top ranked undergraduate engineering program.

Symonds thought about majoring in aero-astronautics (designing airplanes), but an engaging ocean engineering professor, Dr. Dick Yue, (“he reminded me of anime”) turned the surfer girl from Maui on to the study of breaking ocean waves. One of only three women in her class, Symonds earned her B.S. in 2002 and entered MIT’s ocean engineering graduate school. For her master’s thesis, she developed a long range sonar monitoring system, using remote sensing technologies, good enough to be featured in Science magazine. It caught the attention of NOAA, which now uses the far-reaching system for conservation efforts to estimate fish populations.

MIT’s tech development program took her to Masdar, United Arab Emirates – the world’s first Zero Carbon/Zero Waste city – where she helped establish a sister university focused on renewal energy technologies. In 2008, she earned her Ph.D. in mechanical and ocean engineering at MIT.

After working in Boston as an energy economist and as a renewable energy subject matter expert for the think tank McKinsey Consulting



Company, Symonds came home to work at the Trex Enterprises Corporation’s research and development office in Maui in 2009.

“I missed inventing for sustainable and green technologies,” says Symonds who develops remote and autonomous sensor systems for applications in the ocean environment. The only woman scientist and just one of three women at Trex’s Maui office, she recently received her first funding award to develop a self-powered positioning beacon, which uses ocean wave energy to enable a boat’s distress signal to transmit well beyond the previous two-day limit of battery-powered beacons.

A key note speaker, together with Senator Daniel Inouye, at the 2010 Hawaii State Science Fair, Symonds came home, in part, to encourage girls to pursue careers in science and technology. Mr. Ginoza, who set her on her path to MIT, would be proud.

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