Chair of Session 17

ENERGY HARVESTING

A Zachary Trimble is an Assistant Professor of Mechanical Engineering at the University of Hawai'i at Manoa. Zac's research focuses on precision machine design industrial automation and renewable energy.

Zac received both his Ph.D. (2011) and M.S. (2007) in Mechanical Engineering from the Massachusetts Institute of Technology (MIT), and was awarded the Carl G. Sontheimer Prize for Excellence in Innovation and Creativity in Design for his work on "Flexure Based Resonant Energy Harvesting Devices". In addition to vibration and energy harvesting research, Zac has worked on a device for correction of esophageal atresia in infants, an underwater robot for large ship hull inspections, an unmanned remote aerial survey vehicle, a passive tuning mechanism for military field radios, MRI actuated medical devices, CNC machine coding, expandable structures for dynamic seals, and automation for climate change research. Currently he is interested in vibration energy harvesting and precision machine design, especially as applied to electro-magnetic machine elements and systems.

Zac worked in the largest open pit copper mine in North America, has a CDL and heavy equipment operator's certification, and (with his wife) owned a retail dive shop. In his free time, he plays volleyball, scuba dives, participates in power sports, has a private pilot license, and is an Eagle Scout.