

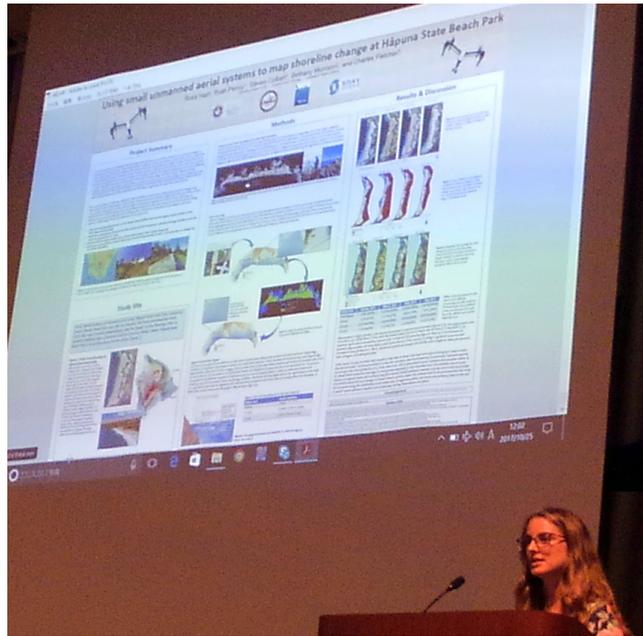


October 31, 2017

PI-CSC graduate student earns international recognition for Hawai‘i shoreline work

Rose Hart, a graduate student at the University of Hawai‘i at Hilo in the [Tropical Conservation Biology and Environmental Science](#) program, recently received one of four “Excellent Awards” from the Institute of Mathematics for Industry (IMI) at Kyushu University, Japan, for her poster presentation at the *2017 Forum “Math-for-Industry” Conference: Responding to the Challenges of Climate Change: Exploiting, Harnessing, and Enhancing the Opportunities of Clean Energy*, held at the University of Hawai‘i at Mānoa, October 23-26. Hart was, in fact, the only student to receive the award who was not a student from Kyushu University itself. As part of her prize, she has also earned a two-week visit to IMI to learn about the institute’s research and to present her work to their community.

The PI-CSC-funded work that Hart presented was titled “Using small unmanned aerial systems to map shoreline change at Hāpuna State Beach Park” and was developed out of the [Manager Climate Corps](#) program at UH Hilo. Hart’s overall project aims to quantify shoreline change rates, both past and current, along three geologically diverse coastal stretches. To accomplish this, she combines historic aerial photography with newly acquired unmanned aerial system imagery of select Hawaiian coastlines, to determine the rates of change of a white-sand beach (Hāpuna), a sea cliff (Honoli‘i), and a coastal lava field (Kapoho). These rates are then compared with sea level rise projections to estimate future impacts to coastal communities, as well as natural and cultural resources. Ultimately, the goal of the project is to supply these shoreline change rates and sea level rise projections as a visualization tool for county planners to use in making future coastal management and adaptation decisions.



We offer Rose Hart sincere congratulations on her recognition of excellence and wish her much success in finishing her important work on Hawai‘i Island.