DHS Career Development Grant Fellows, Grace Python and Alex Pollara receive hands-on experience in summer internships with the Coast Guard. As part of their DHS fellowship requirements, Stevens Maritime Systems graduate students Grace Python and Alex Pollara received unique hands-on experience interning with the U.S. Coast Guard this past summer. Pictured above left, Grace Python spent her summer working with VADM Robert Parker, Commander, Coast Guard Atlantic Area (LANTAREA), his leadership team, including Dr. Joseph DiRenzo, Division Chief, and Dr. Jacqueline Jackson, Operations Research Analyst, in the Operations Analysis Division at the Atlantic Area offices in Portsmouth, VA. Selected by VADM Parker to intern at “LANT-7”, Grace worked shoulder-to-shoulder with Coast Guard personnel on risk assessment projects and raw data analysis. When not crunching numbers and finding optimal solutions to asset deployments, Grace had the opportunity to join her colleagues on the USCGC Conchito as it escorted a Navy submarine to port.

During his internship at Sector New York, Alex Pollara worked under the mentorship of Lt. Jason Moritz, Coast Guard Command Duty Officer. Alex’s summer projects included the transition of Stevens Institute of Technology’s video surveillance camera feeds of the Hudson River into Sector New York’s Vessel Traffic System. He also engaged in the deployment of small portable passive acoustic devices, with the assistance of Matt Leahey, USCG Auxiliary Flotilla 21, to record vessel traffic in areas of interest to the Coast Guard.

Both Alex and Grace received invaluable mentorship and on-the-job experience during their internships with the Coast Guard. Collectively, these experiences will contribute to their professional development and ability to assume positions of leadership and responsibility within the homeland security workforce upon the completion of their degrees.

CIMES conducts data acquisition exercises utilizing Liquid Robotics wave gliders. The DHS-sponsored workshop on Persistent Surveillance that was held at Coast Guard Island near Alameda, CA in February 2012 has led CIMES researchers to their first deployment of a Liquid Robotics wave glider towing a Teledyne-Benthos passive bearing detector. On August 29th the combined system was deployed for three hours of data acquisition while the launch boat was maneuvered around the system. A conductivity-temperature-depth (CTD) cast was simultaneously collected to correlate system performance with the actual water column profile, sound velocity was measured using a miniature Sound Velocity Profiler (SVP) and noise from the wave glider and background were recorded using a separate hydrophone.

CIMES will be conducting a series of expanding experiments with its two wave gliders over the next several months. Interested parties are requested to contact Margo Edwards, Director, CIMES at margo@soest.hawaii.edu.

Stevens Institute hosts regional summits and national symposiums focused on strategies to strengthen our nation’s resilience. Over the past two months, leading experts from the Kostas Research Institute for Homeland Security at Northeastern University, Stevens Institute of Technology, and industry and government partners from the Metropolitan Waterfront Alliance, have gathered at the Stevens Institute of Technology campus in Hoboken, NJ, to discuss strategies for enhancing our nation’s resilience in post-disaster events.

The first event, led by Stephen Flynn, Co-Director of the George J. Kostas Research Institute for Homeland Security at Northeastern University, and Michael Bruno, Dean, School of Engineering and Science at Stevens Institute, brought together public sector transportation leaders, emergency managers and experts from major coastal cities around the country as the kickoff event to a series of forums on Hurricane Sandy. The symposium, entitled After Hurricane Sandy: Lessons Learned for Bolstering Transportation Resilience, an Alfred P. Sloan Foundation funded event, was designed to
strengthen the nation’s mass transit, port, and aviation infrastructure to better withstand and more quickly recover from major disasters. The participants identified lessons learned from the Sandy experience that should inform a national agenda for building more catastrophe-resilient transportation systems in urban coastal communities around the country. For more information about the June 25th event, please click on the following link: Resilience Strategies Symposium.

During the month of July, Stevens hosted the Regional Resiliency Summit – A Superstorm Sandy Report Card, presented by The Metropolitan Waterfront Alliance. The summit engaged resiliency experts, emergency management professionals, engineers and scientists, and policy makers and industry representatives, in panel discussions on the local government’s efforts to implement sound resiliency plans and an assessment on the lessons learned by industry and academic leaders in their research and mitigation practices.

CIMES demonstrates advanced sensor and data integration capabilities at JIFX 2013. Dr. Kevin Montgomery, (CIMES) and his team participated in the Joint Interagency Field eXperiment (JIFX) at the National Guard’s Camp Roberts, in California in August. The team utilized the data integration, fusion, visualization and collaboration platform (now released as Collaborate.org) to integrate and visualize data across a series of experiments during the exercise, including the following:

- Interagency Collaborative Situational Awareness Tools
- Social Media/Crowdsourcing Technologies
- Cellular Mapping Technologies
- Physiological Monitoring for First Responders

Participants in the JIFX 2013 included members from DHS, FEMA, Northcom and several local and state emergency responder groups. For more information about CIMES advanced sensor and data integration capabilities, please contact Kevin Montgomery at kevin@intelesense.net.

Carnegie Corporation of New York awards grant for Stevens Institute of Technology workshop on nuclear issues education. Stevens Institute of Technology and the Federation of American Scientists (FAS), have been awarded a grant from the Carnegie Corporation of New York to host a workshop to promote better nuclear issues education. The one-day invitational workshop, to be held in mid-November at Stevens, will bring together university faculty, private foundation officers, think tank professionals and other subject area experts to explore ways to expand university-level nuclear issues education for professionals in the fields of international relations, public policy, security, journalism and energy.

In spring 2014, Stevens School of Engineering and Science will also introduce a graduate course on nuclear terrorism and security, which will study nuclear threats, with a focus on the role of maritime security in prevention and consequence assessment. Dr. Julie Pullen, Director CSR, will co-teach the course together with Dr. Edward Friedman, emeritus professor of technology management. Friedman and Pullen are also co-PI’s on the Carnegie Grant. To learn more, please visit the Stevens press release, at Nuclear Education Workshop.

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www.stevens.edu/MIREES

MIREES is a National DHS Science and Technology Center of Excellence in Port and Marine Security.

The Center for Secure and Resilient Maritime Commerce (www.stevens.edu/CSR) is led by Stevens Institute of Technology and The Center for Island, Maritime and Extreme Environment Security (www.cimes.hawaii.edu) is led by the University of Hawaii.