



A Monthly Newsletter of the
National Geospatial Technology
Center of Excellence

Innovation in Geospatial Science and Technology Education

Empowering Colleges: Expanding the Geospatial Workforce

In this issue:

- GeoTech Student Competition p. 1
- Student Reflections p. 2
- Power of Data Project p. 2

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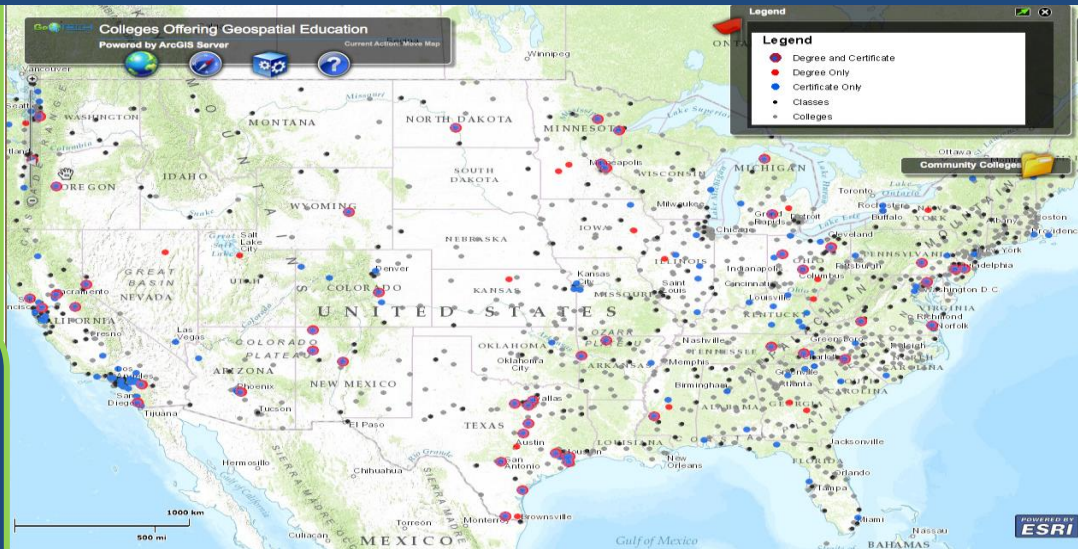
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The GeoTech Center is virtual, comprised of a Director, four Associate Directors, and nine Assistant Directors from institutions across the nation. The central office is located at Jefferson Community and Technical College in Louisville, KY.

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GeoTech Center Student Competition

Introduction

The 2015 Geospatial Technology Skills Competition, co-sponsored by the GeoTech Center and URISA, is now in the record books. The competition was created to showcase the geospatial technology skills of undergraduate students from 2- and 4-year geospatial programs across the country. The preliminary round of the skills competition required students to create a project that demonstrated their geospatial knowledge and addressed a real-world problem. Thirteen undergraduate students from across the United States entered the preliminary round of the competition and presented their projects via YouTube videos. The presentations were judged by a panel of five geospatial experts and evaluated based on preparation, analysis, application, clarity, and thoroughness.

Entries

Student submission to the competition covered a wide range of topics, including: A Paddlers Guide to the Delaware River; Camp Douglas: Searching for the Confederacy in Chicago, Illinois; Toxic Mapping with Python and GIS: Exploring Relationships Between Carcinogen Dumping and Cancer; Mapping the Aviation Trail; The Syrian Conflict and Migration of Refugees; Distribution of Terrorist Incidents in the Contiguous United States (1970-2013); Pet Friendly Emergency Shelters: Kaua'i, Hawai'i; Shaktoolik, Alaska: A Grim Geospatial Analysis Future for the Coastal Village; Shading out the Gun: How Baltimore City Greenspace Relates to 2013 Homicides; Identifying Wildlife Risk Areas in Washington State; Hurricane Risk: Analysis of the Caribbean's Leeward and Windward Island Groups;

Investigating the Migration of Three Tree Species: Black Cherry, Red Maple, and Shagbark Hickory; Comparison of Wooded Acreage Over Time on A Small Farm (5.55 Acre) in Anderson County, KY.

Results

From this group of projects, the preliminary round judges determined the four finalists who would present their projects at the 2015 GIS-Pro & North West GIS Conference in Spokane, Washington on October 21, 2015. The four finalists each received an all-expense paid trip to the conference and presented their projects in an open session to judges from URISA and the GeoTech Center as well as an audience of conference attendees. The finalists, their projects, and the final standings of the 2015 Geospatial Technology Skills Competition are:

- 1st Place:** Matthew Seto, a senior from the University of Washington, Tacoma: *Identifying Wildfire Risk Areas in Western Washington State.*
- 2nd Place:** Amy Halloran, a senior from De Paul University: *Toxic Mapping with Python and GIS: Exploring Relationships Between Carcinogenic Dumping and Cancer.*
- 3rd Place:** Molly Finch, a freshman from the Community College of Baltimore County: *Shading out the Gun: How Baltimore City Greenspace Relates to 2013 Homicides.*
- 4th Place:** Kevin MacMahon, a second year student from the Community College of Baltimore County: *The Syrian Conflict and Migration of Refugees.*

Student winners will present their research on Dec 16 from 2-3 pm EST at a GeoTech Center webinar. Please join us and stay tuned for the 2016 Geospatial Technology Skills Competition!

Student Reflections

It was a pleasure to represent the National GeoTech Center as a Palomar College GIS student at this year’s ATE AACC conference in Washington D.C. Seeing other STEM projects and personally connecting with their developers allowed me to sample many other fields outside GIS that interested me such as: welding, cyber security, nanotechnology, and green technology. Participating in the various exhibitions, workshops, and seminars not only rejuvenated my interest in learning and broadening my knowledge, but it also encouraged me as a student to inspire others about STEM.

Before I attended this year’s conference, I felt that there were only a few people who shared my interest in career fields like cartography and GIS. While at my exhibition booth on Thursday, I encountered a number of passersby that were eager to discuss my tsunami-mapping project, and these conversations brought with them some powerful reassurances that geospatial technology is capturing the attention of geographers and non-geographers alike. While on the plane back to Los Angeles, I recalled all the interesting people I had personal conversations with, as well as the guest speakers I had the honor to listen to. Those experiences are truly transformative, and I hope to be able to return to the ATE conference next year with an even more inquisitive mind.



Chris Schrenk is a second year student at Palomar College located in North County San Diego. His professor and mentor is Wing Cheung, Professor of Geography, Palomar College. For more information about the Geospatial Program at Palomar, please contact Professor Cheung at wcheung@palomar.edu.

The Power of Data (POD) Project

The Power of Data Project has been recognized by Change the Equation as an [Accomplished STEMworks Program](#) that makes a real impact on students. Our professional learning programs enable secondary teachers to utilize geospatial technologies (GST) within authentic STEM projects to increase 6-12 grade students' 21st century skills, GST and STEM career awareness.

We will soon be recruiting 15 exceptional professional development coordinators, science/STEM curriculum coordinators, college faculty, and any individuals who support teachers on a regular basis to apply to attend our POD Facilitation Academy to learn to replicate POD Teacher Workshops across the nation.

Facilitators will receive: 1) \$500 for completion of the Facilitation Academy 2) \$900 to offset cost of travel to Flagstaff; 3) \$500 after each of two POD Teacher Workshops delivered (\$1000 total); 4) \$250 after submitting data from POD Teacher Workshop participants and their students for each of the two POD Teacher Workshops implemented (\$500 total). Teacher Workshop participants will also be compensated for participating.

SAVE THE DATES! The **POD Facilitation Academy** will be held in **Flagstaff, Arizona July 11-15, 2016**. More information and application details will be available on a website (currently in development) in January.

Please email Lori Rubino-Hare (Lori.Hare@nau.edu) with any questions you may have and to be notified when our website and application is live!

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**Special Achievement in GIS
 2015 Award Winner**