

2012 USGIF Scholarship Winners

USGIF annually awards scholarships to promising high school seniors, and collegiate undergraduate, graduate and doctoral students studying or planning to study geospatial intelligence related fields.

All scholarship recipients are chosen based on their academic and professional excellence in a field related to the geospatial intelligence tradecraft. Qualified candidates are selected by the Foundation's Scholarship Subcommittee, composed of USGIF member organizations.

In the past 9 years, USGIF has awarded \$584,000 to exceptional students. This year, USGIF awarded \$104,000 to 25 recipients: 5 Ph.D. candidates, 6 master's candidates, 7 undergraduates and 7 high school seniors.

To apply for a scholarship, visit www.usgif.org

DOCTORATE

RAEHEL BIANCHETTI

Pennsylvania State University

Raechel is a graduate assistant in the Penn State GeoVISTA Research Center working under Dr. Alan MacEachren on a project for the Department of Homeland Security involving the cognitive effects of emergency management map symbol design. Her dissertation research integrates remote sensing, geovisual analytics, and cognitive GIScience towards improved visual interpretation of data sources for creating situational awareness.

KATARINA DOCTOR

George Mason University

Katarina is a pilot with experience flying scientific missions such as aerial surveys of coastal Virginia post-Hurricane Irene as well as ancient Mayan agricultural fields in Belize. She is currently working with the Naval Research Laboratory through the Student Temporary Employment Program (STEP). Her doctoral research involves developing algorithms for anomaly detection by fusing hyperspectral imagery with thermal, LiDAR, and radar data.

DAVID KELBE

Rochester Institute of Technology

David Kelbe earned his bachelor's degree in imaging science from Rochester Institute of Technology (RIT) in 2010 and is currently a graduate student in RIT's Chester F. Carlson Center for Imaging Science. Kelbe was recently recognized for his project, "Linking the Real and Simulation Environments of Airborne Small Footprint Waveform Lidar." He is working closely with collaborators at the National Ecological Observatory Network. He travels internationally to volunteer in various capacities and also serves as a teaching assistant and mentor on the RIT campus.

LEANNE SULEWSKI

University of South Carolina

Leanne has worked for the South Carolina Army National Guard as a GIS analyst, training Joint Operations Center personnel basic GIS functions and map production, and also creating custom analytical products for briefings. At USC she has utilized UAV Synthetic Aperture Radar data from NASA to create a model predicting BP oil spill movement based on wind direction data, and is working to create a more holistic framework for analyzing energy infrastructure vulnerability.

ANDREW THORPE

University of California, Santa Barbara

Andrew followed up undergraduate studies at Brown University with a year studying the climate evolution of Mars at the Institute of Geosciences, Planetology and Remote Sensing at the Free University in Berlin. His dissertation research aims to improve methods for detecting absorption features of atmospheric greenhouse gasses, thereby permitting high-resolution mapping of local emissions and improving classification methods for complex urban environments.

GRADUATE

SHAWN BALDWIN

University of Southern California

Shawn has two decades of cartographic experience, now evolved to include interactive and dynamic map products. He is currently supporting the GEOINT Community with development of vehicular and flight simulation products. His graduate research integrates cartography with project management techniques, developing a comprehensive database of medical facilities—a critical need for homeland security purposes.

SARA FLECHER

University of South Carolina

Sara is a research assistant supporting analysis of microclimatological impacts of agricultural practices. Her prior experiences provided exposure to the challenges of massive data management, infrastructure limitations, legacy systems variability, and the need for process standardization. Her thesis research involves development of a web-based geospatial tool for sugarcane farmers to improve crop-burning practices and mitigate adverse impacts on the health of the surrounding communities.

DANIEL GIORDANO

University of Maryland

Daniel is currently an Intelligence Analyst with the FBI, working in counterterrorism, counterintelligence, and weapons proliferation. While an undergraduate student at George Washington University, he began to appreciate the value of GIS for assessing risk, visualizing possible outcomes, and presenting complex information in a comprehensible way. His graduate studies in GIS at the University of Maryland are enhancing his ability to integrate the geospatial context within his analyses.

NICOLE GRAMS

University of Oklahoma

Nicole is a prior recipient of the National Oceanic and Atmospheric Administration (NOAA) Ernest F. Hollings Scholarship, which allowed her to intern with the Storm Surge Unit at the National Hurricane Center. She is currently a graduate assistant working with Dr. May Yuan in the Center for Spatial Analysis on verification of the Coastal and Inland Flooding Observation and Warning (CI-FLOW) project using remote sensing and GIS techniques.

NOUMAN HUSSAIN

Pennsylvania State University

Nouman works as an AfPak Media Analyst for ConStrat, leveraging his expertise with Urdu, Farsi, Hindi, and Punjabi in support of a contract with U.S. CENTCOM. At Penn State he is augmenting his strengths in the social sciences with geospatial capabilities in remote sensing and GIS, recognizing the importance of geospatial intelligence to address emerging demands for analysis, collection, and dissemination of information regarding locations affected by conflict, natural disaster, and humanitarian crises.

JORDAN LAWVER

Ohio State University

Jordan is currently working with the OSU Center for Surveillance Research and the Air Force Research Laboratory (AFRL) towards creation of a geometrically constrained persistent tracking algorithm robust to occlusion and projective anomalies. He previously served with the OSU Mapping & GIS Laboratory supporting NASA Mars Exploration Rover and Lunar Reconnaissance Orbiter missions, and he served with the Photogrammetric Computer Vision Laboratory where he built an algorithm for 3D-recovery in automated surveillance algorithms.

UNDERGRADUATE

ANTHONY BARRON

University of Texas at Austin

Anthony served in Iraq as an ISR tactical coordinator, subsequently working with 3cGeo and the Texas Natural Resources Information System (TNRIS) exploring demographic data and georeferencing historical imagery respectively. At the University of Texas, he is focused on developing spatial analysis skills in GIS, towards more effective tactical and strategic analysis within the DoD mission.

JOHN BYERS

University of Idaho

John is a business information systems major at the University of Idaho, minoring in geographic information systems. His capabilities as a GIS programmer opened the door for an opportunity with the Idaho Geological Survey, helping to convert CAD drawings prepared by field geologists into feature databases more suitable for GIS analysis.

ALYSHA HECKMAN

University of Maryland

Alysha is pursuing a double major of GIS and anthropology. She works in the University of Maryland's Geosimulation Laboratory where she is leading a study of human behavior in critical scenarios (e.g., response to earthquakes). She aims to become a GEOINT analyst and envisions applying her skills to the challenge of Latin American narcotics trafficking.

MARIAH PERKINS

Washington College

Mariah is currently working toward a major in anthropology and is particularly interested in the GEOINT of human terrain. She is a lead intern in the Washington College GIS lab, has interned with Booz Allen Hamilton, and has been contributing to an NGA project developing a GIS training module for land tenure in Africa, with Ghana as a case study.

TANYA PETACH

Harvard University

Tanya is an environmental engineering major currently working at Harvard's MacDonald Lab in Geology. Here she is correlating satellite imagery with field data to produce more accurate geological mapping of the Mongolian steppe. Tanya perceives geospatial science and technology as increasingly valuable for scientific research and is seeking further ways to apply the GEOINT approach to earth science.

KYLE SMITH

James Madison University

Kyle is a geographic science major with a minor in anthropology. He also has work experience at the Engineer Research and Development Center (ERDC) Topographic Engineering Center (TEC) through the Student Career Employment Program. He seeks to improve the ability to use remotely sensed imagery for deriving socio-cultural information regarding settlement morphology.

EVERLEIGH ELIZABETH STOKES

Pennsylvania State University

Everleigh is a geography major with a bioethics and medical humanities minor, and she is a member of the highly selectively Penn State Presidential Leadership Academy. She has interned for the Community Development Department of Albemarle County, VA. She aims to become a medical geographer working to eradicate infectious disease in developing nations.

GRADUATING HIGH SCHOOL SENIOR

TRAVIS BROWNING

Dover Area High School, Dover, PA

Travis developed a passion for geographic information science at Dover High School, which led to an internship with the York County Planning Commission. He is now a student at Harrisburg University of Science and Technology, where he is majoring in geospatial technology.

EHASAN JAFREE

Academy of Science, Sterling, VA

Ehasan used GIS in his senior project on "Determining the Correlation between Land Cover and Stream Health in Loudoun County," recognized for excellence at the Virginia State Science and Engineering Fair. He is attending Old Dominion University with a major in biochemistry.

JOHNATHAN JOHNSTON

Sebastian River High School, Sebastian, FL

Johnathan was a platoon commander and member of the honor guard with his Navy JROTC unit at Sebastian River High School. He is now enrolled at Florida Atlantic University, majoring in urban and regional planning with particular interest in transportation planning.

STEPHEN MCFALL

Smethport Area Junior Senior High School, Smethport, PA

Stephen has a strong record of community service and volunteer work with 4-H, including GIS counselor for first year students in 2009, and he spent a year in Brazil as a Rotary Youth Exchange Student. He is now studying physics, international relations, and GIS at Washington College.

CHANDLER MORRELL

Loudoun County High School, Leesburg, VA

Chandler was introduced to geographic information science at Loudoun County High School where he developed a global climate change study collating data for past and projected temperatures, precipitation, and extreme weather events. He is now studying international relations at Virginia Tech.

BRIANA NEUBERGER

Chantilly High School, Chantilly, VA

Briana was a member of the 2011-12 Technology Student Association (TSA) team at Chantilly High School that won the Virginia TSA state geospatial competition. She is now majoring in imaging science and engineering at Rochester Institute of Technology.

ANA PATRICIA KIM NORIEGA

Centreville High School, Centreville, VA

Kim took a new Geospatial Analysis course during her senior year at Centreville School, and she is interested in using geospatial technology to support more effective law enforcement. She is now enrolled at George Mason University, majoring in forensic science.