

21st May 2019

Dear Spatial Sciences Institute Community:

This year's USC Commencement was another wonderful occasion to celebrate the many accomplishments of this academic year. Here are some highlights of what our students, faculty, and staff of Spatial Sciences Institute have achieved over the past six months.

May I start by offering hearty congratulations to the following students and alumni:

- all students who have graduated as of the Fall 2018 and Spring 2019 and who are anticipated to graduate as of the Summer 2019 semester: 11 with a B.S. in GeoDesign; 31 with a Graduate Certificate in Geographic Information Science and Technology (GIST); 9 with a Graduate Certificate in Geospatial Intelligence; 50 with an M.S. in GIST; 2 with an M. S. in Human Security and Geospatial Intelligence; and 4 with an M.S. in Spatial Data Science;
- the 42 graduates from all of our academic programs who were this year's inductees into our [Nu Theta Chapter of Gamma Theta Upsilon](#) (GTU), the international geographical honor society recognizing geography's next generation of leaders;
- Population, Health and Place doctoral candidate **Johanna Avelar Portillo** for receiving a 2019 USC Graduate School Summer Research and Writing Grant Award in support of her dissertation work on homelessness and the right to water, sanitation and hygiene, and a scholarship from the International Cartographic Association and the US National Committee to the ICA to attend and present at the [2019 International Cartographic Conference](#) (ICC) in Tokyo, Japan this summer;
- Population, Health and Place doctoral candidate **Douglas Fleming** for receiving the 2019 General Education Graduate Assistant Award;
- Population, Health and Place doctoral student **Lois Park** for receiving a scholarship from the International Cartographic Association and the US National Committee to the ICA to attend and present at the [2019 International Cartographic Conference](#) (ICC) in Tokyo, Japan this summer;



- Population, Health and Place doctoral student **Emily Serman** for receiving a Provost’s Research Enhancement Fellowship to support her research on modeling of influenza for the 2019 – 2020 academic year;
- Population, Health and Place doctoral student **Li Yi** for receiving a travel award supported by the National Science Foundation to attend the AAG-UCGIS Summer School 2019 on Reproducible Problem Solving with CyberGIS and Geospatial Data Science;
- M.S. GIST graduates **Christina M. Brunsvold** and **Julee Wardle** for their induction in May 2019 into [Phi Kappa Phi](#), the academic honor society which recognizes academic excellence in all branches of endeavors;
- M.S. GIST student **Joseph C. Toland** as the [2019 USC Spatial Esri Development Center Student of the Year](#) award winner for his thesis “A Model for Emergency Logistical Resource Requirements in Los Angeles County”;
- M.S. GIST student **Michael Babcock** for receiving honorable mention in the 2019 USC Spatial Esri Development Center Student of the Year competition for his thesis “The Power of Crowdsourcing for Addressing Climate Change and Improving Food Security: A Spatial Web GIS Data Hub of Biochar Research and Practice”;
- M.S. GIST 2019 Thesis Prize winners:
  - 1<sup>st</sup>: Prize: **Christopher Marder**: “The Role of Precision in Spatial Narratives: Using a Modified Discourse Quality Index to Measure the Quality of Deliberative Spatial Data” (**Dr. Jennifer Bernstein**, advisor);
  - 2<sup>nd</sup> Prize: **Cass Kalinski**: “Building Better Species Distribution Models with Machine Learning: Assessing the Role of Covariate Scale and Tuning in Maxent Models” (**Dr. Karen Kemp**, advisor); and
  - 3<sup>rd</sup> Prize: **Brian Jeantete**: GeoBAT: Crowdsourcing Dynamic Perception of Safety Data Through the Integration of Mobile GIS and Ecological Momentary Assessments (**Dr. Jennifer Bernstein**, advisor);
- M.S. in Spatial Data Science student **Xin Yu** for receiving an Informatics Merit Award from the Viterbi School of Engineering as an outstanding graduate student;
- Human Security and Geospatial Intelligence (HSGI) minor **Dillon Bonde** upon his commission into the U.S. Marine Corps;
- M.S. GIST student **Robert Andrew Smith** upon his commission into the U.S. Army;
- Spatial Studies minor **Lauren Anderson** for induction into Phi Beta Kappa;

- HSGI minor and M.S. in GIST student **Erin Barr** for recognition as a Steven and Kathryn Sample Renaissance Scholar, honoring students who graduate with distinction in widely separated fields of study, and for receiving the Order of the Laurel and the Palm, the highest university honor accorded to undergraduates upon completing their programs of study;
- B.S. in GeoDesign major **Austin Chow** for recognition as a Discovery Scholar, honoring undergraduates who produced exceptional original scholarship or creative work at USC while compiling a distinguished overall academic record, and for graduating from the B.S. in GeoDesign Program with honors;
- B.S. in GeoDesign and B.A. Jazz Voice and Composition major **Grace Corsi** for recognition as a Renaissance Scholar, for receiving the Order of the Laurel and the Palm, and for graduating from the B.S. in GeoDesign Program with honors;
- B.S. in GeoDesign major and HSGI minor **Benjamin Friedman** for receiving the Order of Troy, for distinction beyond their peers in at least one facet of university life and for notable contributions to the university community or the world at large, and for graduating from the B.S. in GeoDesign Program with honors;
- B.S. in GeoDesign major and Political Science minor **Julia Fruithandler** for receiving the Order of Troy, for induction into Phi Beta Kappa, and for graduating from the B.S. in GeoDesign Program with honors;
- B.S. in GeoDesign major and Real Estate Finance minor **Jenna Gray** for recognition as a Renaissance Scholar and for graduating from the B.S. in GeoDesign Program with honors;
- B.S. in GeoDesign and B.A. in Environmental Studies majors **Autumn Gupta** for induction into the Mortar Board National Senior Honor Society;
- B.S. in GeoDesign major and Architecture minor **Eliza Gutierrez-Dewar** for receiving the Order of Troy, for induction into Phi Beta Kappa, and for graduating from the B.S. in GeoDesign Program with honors;
- HSGI minor **Seung Won Ha** for recognition as a Renaissance Scholar;
- Spatial Studies minor **Natalie Hayashibara** for induction into Phi Beta Kappa;
- HSGI minor **Min Ji Kim** for induction into Phi Beta Kappa;
- Spatial Studies minor **Lauren Mullarkey-Williams** for receiving the Order of Troy;

- HSGI and Spatial Studies minor **Mia Poynor** for receiving a [Boren Scholarship](#) for intensive language study in Brazil awarded to individuals committed to working in the federal national security arena and the Order of Troy;
- Spatial Studies minor **Seher Randhawa** for being selected as a [Warren Bennis Scholar](#) for the 2019 – 2020 academic year, during which she will receive intensive leadership training and access to top USC professors;
- HSGI minor and M.S. GIST student **Alanna Schenk** for receiving a 2019 – 2020 [Fulbright award](#) to study in the Master of European Studies program with an Arctic Specialization at [Aalborg University](#) in Aalborg, Denmark; for recognition as a Discovery Scholar; designation as a [Levan Scholar](#), an honor given to those USC undergraduates who exemplify engagement with and contribution to the core values of humanity and ethics in their undergraduate experience; selection as a \$10K Global Scholar prizewinner, in recognition in excellence in studies both at home and abroad; and for induction into Phi Beta Kappa;
- M.S. GIST student **Kevin Mercy** for being selected for the USGIF Golden Ticket program; B.S. in GeoDesign student **Benjamin Friedman** for receiving a travel scholarship; and HSGI and Spatial Studies minor **Mia Poynor** and HSGI and Spatial Studies minor **Christian Relleve** for being named student assistants at the 2019 GEOINT Symposium presented by the U.S. Geospatial Intelligence Foundation in San Antonio, Texas from June 2 – 5, 2019; and
- Spatial Studies minor **Kenneth Egelkroust** and Graduate Certificate in GIST student **Bryna Mills** for being selected as student assistants at the Esri User Conference in San Diego from July 8 – 11, 2019.

Our faculty-directed student research continues to receive notable recognition. We are very proud to acknowledge:

- recent publications co-authored by SSI undergraduate researchers under the direction of **Dr. Andrew Marx**: *Detecting Village Burnings with High-Cadence SmallSats: a case-study in the Rakhine State of Myanmar* in *Remote Sensing Applications: Society and Environment* and [A Lightweight, Robust Exploitation System for Temporal Stacks of UAS Data: Use Case for Forward-Deployed Military or Emergency Responders](#) in *Drones*;
- all students and their SSI advisors who presented their research in the USC Provost’s 2019 Undergraduate Symposium for Scholarly and Creative Work:
  - **Emmanuel Carrera Ruedas, Lilly Nie, and Chloe Whipple**: “Superblocks for Los Angeles – Sustainable Urban Alternatives Evaluated with Geodesign” (**Dr. John Wilson** and **Beau MacDonald**);

- **Austin Chow** and **Zoe Lee**: “The Macro of the Micro: A Geospatial Exploration of Economic Development’s Effect on Small Business Vitality in Los Angeles” (**Dr. John Wilson** and **Beau MacDonald**);
  - **Kenneth Egelkrout**: “Soil Arsenic Pollution at Residences Near Exide Battery Recycling Plant” (**Dr. An-Min Wu** and **Dr. Jill Johnston**);
  - **Jenna Gray**: “Affordable Housing and Open Space Site Identification Analysis” (**Dr. Travis Longcore** and **Beau MacDonald**);
  - **Jong Su Kim, Young-Kyung Kim, Garrett Nance, and Mia Poynor**: “Detecting Village Burnings with High-Cadence SmallSats: A Case Study in the Rakhine State of Myanmar” (**Dr. Andrew Marx, Dr. Steven D. Fleming, and Richard Windisch**);
  - **Samantha Levi**: “Detecting and Characterizing Submarine Groundwater Discharge (SG) on Santa Catalina Island (**Dr. Su Jin Lee** and **Dr. Lynn Swartz Dodd**);
  - **Cameron Levine** and **Jacqueline Sosa**: “A Study on Property Values in Residential Areas in Los Angeles County” (**Dr. Su Jin Lee**);
  - **Emily Nixon**: “The Effect of Point Source Pollution on the Health and Resilience of the Southern California Kelp Forest Ecosystem” (**Dr. Laura Loyola**); and
  - **Seher Randhawa** and **Jingran Tao**: “Community Science Tree Inventory: Spatial Analysis of the Los Angeles Urban Forest” (**Dr. John Wilson** and **Beau MacDonald**);
- the 2019 Undergraduate Symposium winners:
    - **Emily Nixon**, honorable mention in the Life Sciences category; and
    - **Seher Randhawa** and **Jingran Tao**, the Interdisciplinary Award for the Social Sciences.
- The USC Spatial students who presented at the 2019 Los Angeles Geospatial Summit:
    - **Adam Vaccaro**: “Automated Wetland Hydroperiod Mapping Integrating Optical Satellite Imagery and Synthetic Aperture Radar”;
    - **Samantha Levi**: “Investigating Submarine Groundwater Discharge on Santa Catalina Island, CA”;
    - **William Fulkerson, Elisha Ibanga, Cari Porter, and Richard Windisch**: “Disaster Mitigation Through Data Collection and Exploitation”;
    - **Jenna Gray**: “LA ROSAH – Affordable Housing and Open Space Development Analysis”;
    - **Harrison J. Knapp, Cameron M. Levine, Kiana Kerr, Ariel L. Simons, and Xiaozhe Yin**: “Characterizing light pollution along the Southern California coast using hemispherical photography”;
    - **Tori Oulie**: “Coastal Vulnerability Assessment for Archaeological Sites on San Clemente Island and San Nicolas Island, California”;
    - **Richard Windisch, Jong-Su Kim, and Young-Kyung Kim**: “Detecting Village Burnings with High-Cadence SmallSats; a case-study in the Rakhine State of Myanmar”.

Our warm congratulations also go to:

- **Dr. Karen K. Kemp** upon her retirement from teaching in the GIST Graduate Programs;
- **Wanting Peng**, Ph.D. candidate, Tongji University and Visiting Scholar, upon the publication of her translation of [Wildland Recreation: Ecology and Management](#), 3rd edition into Chinese; and
- **Dr. John P. Wilson** for receiving the [2019 Education Award from the University Consortium for Geographic Information Science \(UCGIS\)](#), in recognition of a career of professional contributions of both national and international significance to GIScience education.

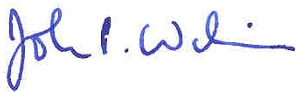
Looking ahead:

- For those of you attending the 2019 **Esri User Conference** in San Diego, please join us at [our annual reception](#) on **Tuesday, July 9, 2019, 6 – 9 p.m.**, at **Roy's San Diego Waterfront** in the Marriott Marquis Hotel. Please RSVP to Stephanie Tran at [transtep@usc.edu](mailto:transtep@usc.edu).
- Please save **Friday, February 28, 2020** for our 10th annual **Geospatial Summit** at the USC Hotel.

We welcome **Dairon Caro** to our SSI staff, who joins us as a program specialist in support of our academic program operations. On behalf of our entire administrative team – **Susan Kamei, Ken Watson, Beau MacDonald, Richard Tsung, Andrea Macko, and Stephanie Tran** – and our faculty, we wish you and your families an enjoyable summer.

As we prepare for the 2019 – 2020 academic year, we look forward to making the world a better place with the power of spatial sciences.

With kind regards,



John P. Wilson  
Professor and Founding Director  
Spatial Sciences Institute