



# **CELEBRATING 15 YEARS**

## **OF USGIF AND THE GEOINT SYMPOSIUM**



United States Geospatial Intelligence Foundation  
**2019 ANNUAL REPORT**



# MISSION

The United States Geospatial Intelligence Foundation's (USGIF) purpose is to promote the effective development and application of geospatial intelligence and to create a stronger community of action among commercial, governmental, and academic stakeholders. USGIF's focus is on thought leadership and support for education, training, and professional development.

## USGIF EXECUTES ITS MISSION THROUGH ITS STRATEGIC PILLARS



### BUILD THE COMMUNITY

USGIF builds the community by engaging professionals from across industry, academia, NGOs, international partners, and the overall defense, intelligence, and homeland security communities to discuss the importance and power of geospatial intelligence.



### ADVANCE THE TRADECRAFT

GEOINT is only as good as the tradecraft driving it. We are dedicated to working with our partners to push the envelope on tradecraft. Through education and lifelong professional development, USGIF provides ample opportunities to gain needed knowledge, skills, and abilities.



### ACCELERATE INNOVATION

Innovation is at the heart of GEOINT. We work hard to provide our members the opportunity to share innovations, speed up technology adoption, and accelerate innovation.

# CELEBRATING 15 YEARS





The United States Geospatial Intelligence Foundation (USGIF) was founded in 2004 as a 501(c)(3) non-lobbying, nonprofit educational foundation.

**FROM THE CHAIRMAN . . . . . 3**

**EDUCATION IN ACTION**

Collegiate Accreditation Program. . . . . 5

Scholarship Program. . . . . 6

Professional Development. . . . . 8

Events. . . . . 10

Young Professionals Group . . . . . 14

**INVOLVEMENT**

Committees . . . . . 17

Working Groups . . . . . 18

**OUTREACH & COMMUNITY ENGAGEMENT . . . . 20**

K-12 STEM Education and Outreach . . . . . 22

Student Assistant Program . . . . . 24

Trajectory Event Center . . . . . 24

**FUNDRAISING . . . . . 26**

**PUBLICATIONS . . . . . 28**

**FINANCIAL REPORT . . . . . 30**

**MEMBERSHIP . . . . . 32**

**BOARD & STAFF . . . . . 36**



# FROM THE CHAIRMAN





USGIF's success is proof of the power of partnerships. Each year, we work across our close-knit, mission-driven community to strengthen and improve tradecraft while expanding and extending our reach with the academic community to instill both a passion for mission and increased geospatial competency.

This report highlights the 2019 successes of the Foundation as a direct result of leveraging the skills of our government, academia, and industry members. Having celebrated the 15th anniversary of USGIF and the GEOINT Symposium, we can reflect on the substantial advances in geospatial capability that now form an integral part of diverse sets of mission success. We recognize the important role of people and tradecraft to help foster and accelerate innovation. We owe a debt of gratitude to our volunteers.

Scholarships, achievement awards, and young professional programs help to drive positive change as we prepare our community for an exciting future. We are excited about millennial creativity and ingenuity, new entrants into our geospatial ecosystem, and the strength and alignment between traditional defense and cutting-edge commercial technologies. This focus on geospatial disciplines offers great promise for timely situational awareness and decision-making—leveraging an innovative, capable workforce.

Enjoy this annual report that highlights our progress. We remain thankful to our stakeholders, thought leaders, and volunteers who provide the energy and resources to advance the calling of the Foundation.

On behalf of the USGIF Staff and Board of Directors,

The Honorable Jeffrey K. Harris  
Chairman, USGIF Board of Directors

**Get Involved.  
Become a Member.  
Support USGIF.**



# EDUCATION IN ACTION





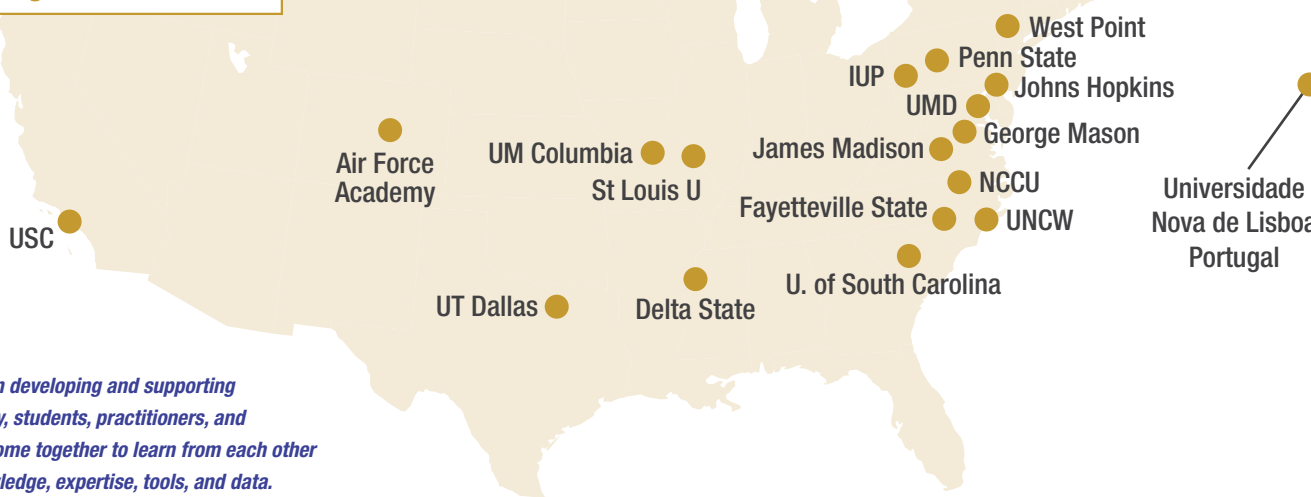
# USGIF Collegiate Accreditation Program

The Collegiate Accreditation Program creates a pathway for undergraduate and graduate students to gain necessary knowledge and skills to contribute to the GEOINT Community. Students graduating from the program receive an academic GEOINT Certificate, giving them a competitive advantage in the job market.

## 2019 Highlights

- We went digital! USGIF Collegiate Accreditation Program certificates are now offered as digital badges.
- Renewed academic accreditation for the University of Missouri.
- Developed three new courses: Introduction to GEOINT, Introduction to Data Science and Introduction to Data Visualization as part of the GeoTech Center/National Science Foundation #1700496 Award.
- Partnered with Hexagon Geospatial to provide free software licenses and technical support to all USGIF-accredited academic programs.
- Accredited the Master of Science degree in Human Security and Geospatial Intelligence at the University of Southern California's Spatial Sciences Institute.

**18** Accredited Geospatial Intelligence Certificate Programs



*"USGIF believes strongly in developing and supporting communities where faculty, students, practitioners, and commercial entities can come together to learn from each other and exchange ideas, knowledge, expertise, tools, and data.*

*By adding two very reputable U.S. based universities – Johns Hopkins University, ranked as the nation's leader in annual research expenditures as well as internationally recognized, and Saint Louis University, one of the nation's oldest and most prestigious Catholic universities with a strong local and regional impact – we continue to expand our group of select institutions committed to geospatial intelligence. Similarly, the accreditation renewal of the University of Missouri at Columbia, one of the first three initially accredited programs by USGIF, showcases the sustainability and long-term commitment of such programs."*

– Dr. Camelia Kantor,  
USGIF Vice President of Academic Affairs

In 2019, **129 students** earned USGIF GEOINT Certificates, bringing the total to **more than 1,050 students** holding the Foundation's academic certificate.

Delta State University, Indiana University of Pennsylvania, Saint Louis University, and Johns Hopkins University achieved USGIF GEOINT Accreditation in 2019.



# USGIF Scholarship Program

USGIF offers scholarships annually to outstanding doctoral candidates, graduate students, undergraduate students, and graduating high school seniors. Accompanying these scholarships are three awards funded entirely by USGIF Organizational Members.

## 2019 USGIF SCHOLARSHIP WINNERS

### Stu Shea USGIF Endowed Scholarship



**Jaclyn Guz**  
Clark University

Named in honor of USGIF's Founder, the \$15,000 Stu Shea USGIF Endowed Scholarship is awarded to a Ph.D. student studying cartography, geography, or imaging science. Guz was awarded her scholarship at the GEOINT 2019 Symposium.

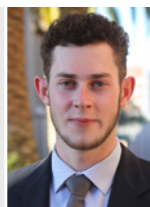
### Dun & Bradstreet Geospatial Data Science Scholarship



**Yaneev Golombek**  
University of Colorado,  
Denver

The \$15,000 Dun & Bradstreet Geospatial Data Science Scholarship is awarded to a student pursuing a Master of Science or Ph.D. in data science with a focus on solving large-scale, location-based problems.

### Reinventing Geospatial Inc. (RGi) Scholarship



**Kevin Mercy**  
University of Southern  
California

The \$10,000 Reinventing Geospatial Inc. (RGi) Scholarship for Geospatial and Engineering, is awarded to an undergraduate student pursuing engineering and geospatial disciplines.

### The Ken Miller Scholarship for Advanced Remote Sensing Applications



**Kris W. Erickson**  
Northeastern University

The Ken Miller Scholarship for Advanced Remote Sensing Applications sponsored by Riverside Research, awards \$10,000 to a graduate student studying remote sensing who plans to enter the defense intelligence workforce.

*"I am extremely grateful to USGIF for helping students make the most of their education in one of the most dynamic and important career fields in the world today. Having been fortunate to win a scholarship from USGIF last year as a graduating high school senior, I know how valuable it is. I was able to attend the GEOINT 2019 Symposium in June in San Antonio thanks to the scholarship, where I made numerous connections with educators and industry professionals and learned more about the tradecraft and emerging technologies. In addition, I have been able to enjoy greater flexibility in my education thanks to the financial assistance rendered through the scholarship."*

*– Alexander Chrvala, Undergraduate Scholarship Recipient  
University of Mary Washington*

## DOCTORATE



**Rachel Jones**  
Missouri University of  
Science and Technology



**Duncan Eddy**  
Stanford University



**Emilio Mateo**  
Ohio State University



**Christopher  
Olayinka Ilori**  
Simon Fraser University



**Stephanie Mundis**  
University of Florida



# USGIF awarded **\$130,000** in scholarships in 2019, the highest amount of annual funds to date.

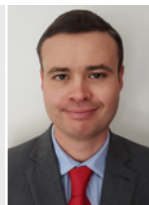
*"It is an honor to be awarded a 2019 USGIF Scholarship. I am excited to be given the opportunity to expand on my academic and research interests by interacting with professionals in the diverse USGIF and broader GEOINT community. I find that the best way to learn and grow is to speak with others in the community about their experiences and achievements. This scholarship offers the opportunity to learn from others' research by attending the GEOINT Symposium. I hope to expand my perspective on the field of geospatial intelligence at my first conference."*

*– Madeleine Guy, Graduate Scholarship Recipient, University of Maryland, College Park*

## GRADUATE



**Scott Howard**  
Colorado State University



**Zach Little**  
University of Alaska,  
Fairbanks



**Brett Ruether**  
University of Utah



**Madeleine Guy**  
University of Maryland,  
College Park



**Jong Su Kim**  
University of Southern  
California



**Rebecca Malone**  
Georgetown University



**Kylie Tokar**  
University of Maryland,  
College Park

**More than \$1.3 million has been awarded since the program began in 2004.**

## UNDERGRADUATE



**Mikhail Kaminer**  
University of Colorado,  
Denver



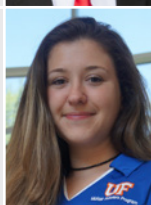
**Alexander Chrvala**  
University of Mary  
Washington



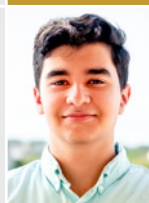
**Brandon Staple**  
University of Colorado,  
Denver



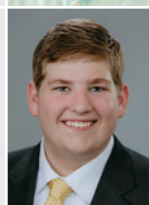
**John Jacobson**  
Arizona State University



**Sarah Marie  
VanSchoick**  
University of Florida

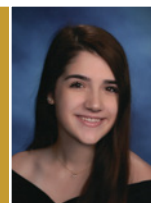


**Dean Alvarez**  
Cornell University

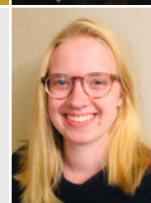


**Trevor Burke**  
Southern Methodist  
University

## GRADUATING HIGH SCHOOL SENIORS



**Alyssa Ann Cassano**  
James Madison University



**Erin Dowdy**  
University of Illinois,  
Urbana-Champaign



**Sierra Taylor**  
Ohio State University



# Professional Development



## Certified GEOINT Professional (CGP™) Program

The Certified GEOINT Professional (CGP™) Program continues to be the gold standard for professional certification in the U.S. GEOINT Community and around the world. The professional designations, GIS & Analysis Tools (CGP-G™), Remote Sensing & Imagery Analysis (CGP-R™), Geospatial Data Management (CGP-D™), and the newly-added Essentials (CGP-E™), prove a deep and balanced understanding of the GEOINT tradecraft.

## In 2019:

- The CGP™ piloted and launched a new entry-level GEOINT Essentials exam. The exam is intended for students graduating from USGIF-accredited academic programs and new professionals to the GEOINT field. Nine universities with 90 test takers participated in the pilot.
- The Foundation offered monthly exams at the Trajectory Event Center, including a no-cost pilot exam for its recently updated GIS & Analysis Tools (CGP-G) certification.
- USGIF awarded 74 Certified GEOINT Professionals (CGP™).



## Certification Boot Camp

In 2019, the Certified GEOINT Professional Exam Boot Camp in GIS & Analysis Tools was launched. Provided through Delta State University, this completely online course assists in the preparation for the Certified GEOINT Professional (CGP™) exam. Twenty-five industry participants completed the boot camp.





## GEOINT Essential Body of Knowledge

USGIF published version 2.0 of its Geospatial Intelligence (GEOINT) Essential Body of Knowledge (EBK). The GEOINT EBK is the foundation for USGIF's efforts to create a pipeline for the global GEOINT workforce via its K-12, Collegiate Accreditation, and Certified GEOINT Professional (CGP™) programs. The updated EBK represents significant progress in the GEOINT field in terms of identifying the different parts that comprise this diverse and dynamic discipline.



***“Version 2.0 of the EBK is significantly more comprehensive and helps guide the pathway into GEOINT learning starting from high school, moving into college, and into the professional workforce.”***

***Dr. Camelia Kantor, USGIF Vice President of Academic Affairs***



## GEOINTegration Summit

USGIF offered its first annual GEOINTegration Summit, a two-day event focused on GEOINT workforce development; the alignment of GEOINT curriculum with government and industry competencies; and strengthening academic partnerships with both government and industry. The summit focused on the evolving nature of the GEOINT tradecraft and its limited accessibility to many faculty, students, and researchers due to the often-classified nature of the intelligence profession.

## Training

USGIF offers training opportunities to help GEOINT professionals pursue professional development and better understand aspects of the GEOINT tradecraft.

- 1,536 people attended training sessions during the GEOINT 2019 Symposium.
- 27 courses were offered at GEOINT 2019 for a total of 54 hours.

## On the Road Again...

USGIF education and professional development staff spoke and presented at a number of events and educational venues in 2019.

- 2019 American Association of Geographers Annual Meeting, Washington, D.C.
- University of Missouri
- U.S. Army Corps of Engineers
- Saint Louis University
- University of North Georgia
- Johns Hopkins University
- Career panel, George Mason University





# Events

Providing forums for teaching, learning, and networking is at the core of what USGIF is as an organization. The Foundation produces a number of events throughout the year to reach thousands of constituents.



The annual GEOINT Community Job Fair provided a free opportunity for 451 job seekers to directly connect with 34 employers in the defense, intelligence, and homeland security communities.



The GEOINT 2019 Sneak Peek offered a preview of the GEOINT 2019 Symposium. About 100 attendees networked, enjoyed breakfast, and heard from NGA's Sandra Auchter, William Caniano, and Christy Monaco about the agency's plans for USGIF's biggest event of the year.



Industry and government experts discussed the evolving small satellite ecosystem, hurdles, and what's on the horizon at this USGIF workshop titled, "The Speed of Innovation." The workshop attracted 411 attendees and 11 exhibitors.



All current and prospective USGIF Working Group members were invited to the first USGIF Working Group Summit. More than 80 attendees learned about the Foundation's efforts across its many Working Groups and to help chart the way ahead.



USGIF and the Small Satellite Working Group hosted a robust breakfast discussion focused on advances in commercial space policy. This first annual event attracted 44 attendees.



The first annual GEOINTegration Summit was a two-day event focused on GEOINT workforce development, the alignment of GEOINT curriculum with government and industry competencies, and strengthening academic partnerships with both government and industry. The event attracted 151 attendees.



# More than **800 attendees** participated in 2019 GEOINT Community Week.



Held in St. Louis, Mo., the Geospatial Gateway Forum, formally Tech Showcase West, brought together a record-breaking 365 attendees. Day one included the inaugural St. Louis Job Fair, YPG events, and a welcome reception. The second day kicked off the unclassified Geospatial Gateway Forum with 12 exhibitors followed by a reception. Day three concluded with the classified day and featured 30+ technology demos at NGA Campus West.



As part of USGIF's 2019 GEOINT Community Week, experts discussed topics on humans teaming with ML/AI, modeling and data visualization, and more. The two-day unclassified and classified workshop drew nearly 300 attendees.



USGIF hosted its second K-12 STEM event for students, families, and teachers in St. Louis. The evening included hands-on, interactive activities and demonstrations from 12 organizations local to St. Louis. More than 300 people attended.



The annual black-tie event brought together more than 400 leaders from across the Defense, Intelligence, and Homeland Security Communities with USGIF Organizational Members, Individual Members, Foundation partners, and their guests for a night of exchanging ideas, reconnecting, and celebrating. Proceeds from the event went to the EdGEOcation Giving Fund.



Held the second Tuesday of every other month, GEOINTeraction Tuesday is a casual networking event featuring a guest speaker. On average, each event draws more than 100 attendees from across the GEOINT Community.

## GEOINTeraction Tuesday 2019 Speakers

**January** - Steve Oswald, Interim CEO, USGIF; Karin Fitzgerald, COO, USGIF; and Ronda Schrenk, VP of Programs, USGIF

**March** - John Sherman, Assistant DNI and IC Chief Information Officer, Office of the Director of National Intelligence

**May** - Tara Bradburn, Senior Lead, Artificial Intelligence, Automation and Augmentation, NGA

**July** - Sandra Auchter, Deputy Associate Director for Capabilities, NGA

**September** - The Honorable James R. Clapper, former Director of National Intelligence (Grand opening of the Trajectory Event Center)

**November** - Andy Brooks, Chief Data Scientist, NGA



USGIF  
**geoint** 2019  
SYMPOSIUM

# Human-Machine Teaming & Innovation Yield Mission Success

June 2-5 • Henry B. González Convention Center • San Antonio, Texas

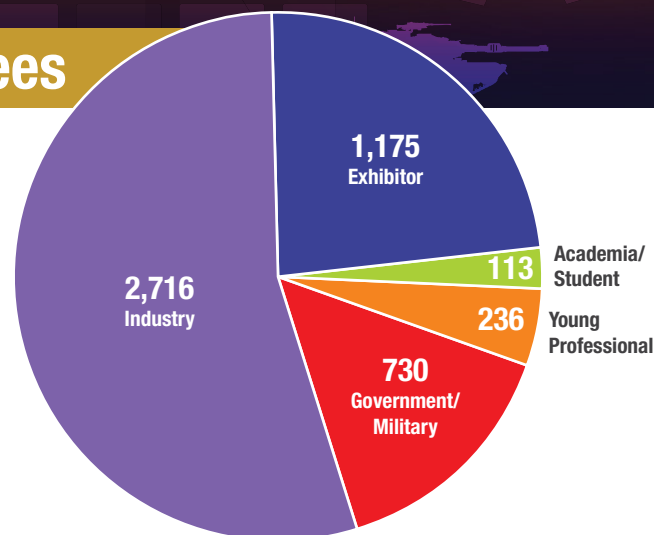
**4,045 attendees**

**GEOINT 2019** was the 15th annual Symposium and the theme was **Human-Machine Teaming & Innovation Yield Mission Success**. The event explored the incredible potential when machine learning is applied as a tool to assist human decision-making.



Attendees included more than 224 representatives from NGA as well as members from each branch of the U.S. military and employees from the U.S. Geological Survey, the National Reconnaissance Office, the U.S. Census Bureau, the Office of the Director of National Intelligence, and more.

**International participation from 33 countries**



**48.45%** of attendees were at the Symposium for the very first time







## GEOINT Foreword

There were 605 participants in GEOINT Foreword, the pre-symposium science and technology day. The Foreword agenda featured presentations on machine learning, advances in training and education as well as keynote addresses from William Hurley, Founder and CEO, Strangeworks, and Bo Ewald, President & CEO, ColdQuanta, Inc.

## EXHIBIT HALL

- 216 exhibitors and 51 sponsors
- Nearly 100,000 square feet of exhibit space
- The Government Pavilion Stage included 13 sessions with 35 government speakers
- For the second year, the exhibit hall housed an Innovation Corner, which featured dozens of 7-minute lightning talks relevant to the 2019 theme.



### The Power of Real-Time Data for Firefighting

TO TAME WILDFIRE, CLOSE THE GAP BETWEEN DATA IN THE CLOUD AND KNOWLEDGE ON THE GROUND  
By Rob Pegararo

**P**aper maps versus an out-of-control wildfire is nobody's idea of a fair fight. But firefighters still too often resort to printed cartography when battling blazes like those that have repeatedly devastated parts of the American West.

Panel Tuesday morning at GEOINT 2019 outlined ways to change that, from collecting more comprehensive data about the risk and extent of wildfires to building ways to transmit that data to individual firefighters in as close to real-time as possible.

The past two years of California fire history have provided ample evidence of the need to attack this problem. Jeff Johnson, CEO of the Western Fire Chiefs Association, reminded the audience of the stunning spread of the fall 2018 Camp Fire.

"From the minute this fire started, around 6:30 in the morning, this fire traveled 6.3 miles in less than an hour and a half," Johnson said.

High winds swept flaming embers ahead of the existing configuration—"embercast"—and in one situation, generated a "rimfire," an unsettling sight shown to the audience via video clip.

"From my perspective as a fire chief and a firefighter and a technologist in the public safety space, this is the time where we bring our ability to analyze data and understand scientifically what's going on in the environment, and find the technological tools that will bring those to the incident commanders," Johnson continued.

But on the ground, he said, we're not there yet. "The incident commanders in a wildfire setting are still in many cases throwing paper maps across the hood of their vehicle."

Kate Dargatzis, co-founder and chief strategist of the firefighting analytics firm Intertec Group, noted the weight of tradition. "Legacy wildfire strategies are built on a 100-year-old methodology," said Dargatzis, who served as California's first female state fire marshal. "We invented this mechanism, this methodology of firefighting, back in the days of mules and shovels."

But the growing danger and damage of wildfires demands changes to what the culture of tactical, or the instinct to solve the

see Wildfires p. 36



Panelists (left to right): Kate Dargatzis, Intertec Group; The Honorable James Bailey, United States Geological Survey; Jeff Johnson, Western Fire Chiefs Association; Richard Brady, California Department of Forestry and Fire Protection; and Judy Giss, Clark University.

"From the minute this fire started, around 6:30 in the morning, this fire traveled 6.3 miles in less than an hour and a half."

—JEFF JOHNSON, WESTERN FIRE CHIEFS ASSOCIATION

## 93.83% of attendees would recommend the GEOINT Symposium to a friend

### Top three reasons for attending GEOINT 2019:

- Network with colleagues
- Benefit from the keynotes, panel sessions, and breakout sessions
- See the latest technologies, services, and solutions in the exhibit hall

*"The GEOINT Symposium is the premier industry event for our tradecraft. The Symposium uniquely facilitates incredibly valuable interactions between our organization and key members of target government, industry, and academic organizations."*

*Director of Marketing and Communications,  
Riverside Research*

Trajectory magazine's award-winning *Show Daily* produced 99 pages of content in 5 days, and *Trajectory on Location* produced 55 videos.





# USGIF Young Professionals Group

The Young Professionals Group (YPG) serves to unite GEOINT professionals in the early stages of their careers. YPG offers programs that parallel the Foundation's mission and are tailored to the unique needs of the younger workforce.



## YPG 2019 Year in Review:

- Continued offering its Acquisitions 101 series
- Led San Antonio-area Boy Scouts of America troops in activity at GEOINT 2019
- Co-hosted two networking socials with Esri's Young Professionals Network
- Volunteered at the K-12 STEM Symposium at the Nysmith School for the Gifted in Herndon, Va.
- Hosted a disaster relief workshop
- Volunteered at Miriam's Kitchen in Washington, D.C.
- Hosted the first Golden Ticket Reunion event

## Introducing New YPG Chapters

USGIF's YPG is largely based in the Washington, D.C. area. However in 2019, YPG expanded its presence by establishing three new chapters in Ann Arbor, Mich.; Melbourne, Fla.; and St. Louis, Mo.





## Golden Ticket Program

The YPG selected 30 individuals from 21 organizations for the GEOINT 2019 Symposium Golden Ticket Program. Since it began eight years ago, the program has helped 180 young professionals who might not otherwise have had the opportunity to attend the Symposium gain valuable insights and in-person connections with industry leaders.

*"My Golden Ticket experience was one of the highlights of my professional career so far. Meeting individuals like Sue Gordon, interacting with the range of excellent GEOINT young professionals, and receiving guidance, wisdom, and inspiration from all was a set of four days well-spent in San Antonio."*

*- 2019 Golden Ticket Winner*



2019 Golden Ticket Winners





# INVOLVEMENT





# Committees

USGIF Committees are made up of member volunteers who direct and carry out the respective missions.

## Academic Committee

The Academic Committee is responsible for USGIF's educational initiatives. In addition to providing scholarships for high school, undergraduate, and graduate students, the committee spearheads USGIF's Collegiate Accreditation program.

### USGIF Academic Planning Committee Members

- Chair: Dr. Steven D. Fleming, University of Southern California
- Dr. Todd S. Bacastow, Penn State University
- Arie Croitoru, George Mason University
- Lt. Col. Ian J. Irmishcer, Ph.D., U.S. Air Force Academy
- Dr. Helmut Kraenzle, James Madison University
- Dr. Rakesh Malhotra, North Carolina Central University
- Dr. Marco Painho, Universidade Nova de Lisboa
- Dr. Narcisa Pricope, University of North Carolina Wilmington
- Dr. May Yuan, University of Texas at Dallas

## Outreach Committee

The Outreach Committee includes the USGIF Awards Subcommittee, which reviews and determines the winners of the USGIF Awards Program.

## Technical Committee

**Chairs: Barry Barlow (Perspecta) & Robert Mott (Hexagon U.S. Federal)**

The Technical Committee identifies emerging trends and is a collection point for community needs, developing technical aspects of the tradecraft to demonstrate true interoperability from common community standards. Subcommittees include the Interoperability Outreach Subcommittee and the Emerging Technologies Subcommittee.

## Tradecraft and Professional Development Committee

**Chairs: Michael Hauck (Consultant) & Steven Thomas (Ball Aerospace)**

The Tradecraft and Professional Development Committee (TC&PDC) advises USGIF regarding the GEOINT tradecraft and profession; seeking to foster strong professional ethics and to advance the effectiveness of GEOINT practitioners across government, industry, and academia; current and future technical developments related to tradecraft; as well as best practices, standards, and evolution in GEOINT professionalization.



**Committees make decisions for the Scholarship Program, GEOINT Certification Program, Awards Program, and more.**



# Working Groups

## Commercial GEOINT Working Group

**Chairs: Paul Sartorius (Leidos) and Sam Unger (Planet Federal)**

Formerly the Small Satellites “Small Sats” Working Group, the Commercial GEOINT Working Group (CGWG) revamped its name in 2019 to build on the rapidly-evolving geospatial data and imagery capabilities in the commercial marketplace. The group seeks to collaborate and coordinate to enable industry, academia, and government to better leverage these commercially-available resources by developing better understanding of data available and the formats, standards, and use cases.

- The CGWG assisted USGIF in developing the first Commercial GEOINT Workshop, which debuted in early 2020.

## NGA Advisory Working Group

**Chairs: Renard Paulin (Trusted Knowledge Options Inc.) and Fred Turman (Peraton)**

The NAWG brings industry and academia together to advise, recommend, and promote actionable ideas to improve NGA's acquisition processes. The NAWG's goals include assessing procurement practices and furthering the agency mission and industry health as well as drive a more efficient procurement culture between NGA and industry.

- Conducted a Cross Table Discussion in conjunction with NGA in October in St. Louis. The dialogue focused on SCIF space and the NAWG unbiased industry insight on how to go about addressing this market.
- Held a discussion at the GEOINT 2019 Symposium on acquisition optimization with NGA representatives to enable how industry and NGA engage in acquisition and procurement activities.

Working Groups have more than **150 USGIF members** who actively volunteer their time to contribute.

## Geospatial and Remote Sensing Law Working Group

**Chairs: Gary Campbell (Womble Bond Dickinson) & Bob Strauss (Raytheon)**

The GRSLWG aims to educate its members, who have a background in legal representation, on legal issues and development related to geospatial information.

## Machine Learning & Artificial Intelligence Working Group

**Chairs: Scott Jachimski (Booz Allen Hamilton), Will Rorrer (L3Harris), and Wynn Thane (Guidehouse)**

The MLAIWG discusses current challenges and strategic initiatives related to the role of artificial intelligence, machine learning, cognitive computing, and deep learning in geospatial intelligence.

- Held a breakout discussion at the GEOINT 2019 Symposium focused on how AI and ML can be integrated into geospatial missions and how to get involved in the working group.
- Assisted in the content planning for the MLAI Workshop as part of USGIF's GEOINT Community Week.

## NRO Industry Advisory Working Group

**Chairs: Nick Buck (Buck Consulting Group) & Ann Waynick (Tenica)**

USGIF established its NRO IAWG to bring together industry professionals from hardware, software, system integrator, and SETA/FFRDC organizations in order to help the government achieve its agency transformation objectives. Specifically, this working group was formed to identify business models that will support government and industry objectives as well as to identify potential pitfalls and corresponding courses of action. The NRO IAWG utilizes topic-specific “Action Teams” to investigate current state, best practices, and generate ideas for implementation.

- Conducted 4 Action Teams: Agile Terms of Reference, Improving Speed to Capability, Attracting Talent, and Hybrid Cloud Decision Framework.
- Accepted numerous topics of interest for consideration from government and industry partners and briefed NRO government programs on Action Team results throughout the year.
- Held a joint discussion in November with the Young Professionals Working Group to obtain YPG input on the Attracting Talent Report.
- Hosted a joint working session in December with the NGA Advisory Working Group to share findings and identify collaboration topics.



## Small Business Advisory Working Group

**Chairs:** Animesh Gupta (Tech On Time), Mary Louise Helbig (ITEN), Sekhar Prabhakar (CEdge Software Consultants), and David Reid (Axiologic Solutions)

The SBAWG was created to guide USGIF in its representation of the small business sustaining members of the Foundation. The SBAWG's primary objective is to assist small business members seeking to gain traction in the GEOINT market by facilitating access and opportunities to build relationships with between the Intelligence Community, Department of Defense, and Civil agencies, prime contractors, and other small businesses.

- Held a panel discussion at the GEOINT 2019 Symposium with NGA's Integrated Program Office (IPO), discussing specific mission focus areas, challenges, and how small businesses can assist the IPO meet their mission and small business objectives.
- Expanded focus and membership in 2020.
- Added two St. Louis-based co-chairs.

## Emerging Working Groups: USGIF established two new working groups, which began activities in 2020.

### Data Rights, Data Licensing and Data Sharing Working Group

The D3WG will examine Intelligence, Defense and Commercial community best practices to improve the accessibility, value and security of data holdings while protecting security, privacy, and confidentiality and addressing lifecycle management, lifecycle cost, maturity models, risk/utility models, tiered access, and secondary/tertiary data use.

### Geospatial Modeling, Simulation & Gaming Technology Working Group

The GMSGWG will educate and inform the community on how geospatial modeling, simulation and gaming technology can be made more interoperable with GEOINT tradecraft. The group seeks to collaborate with industry, academia, and government to highlight advanced research concepts and commercial technology developments supporting geospatial modeling, simulation and gaming systems that are capable of delivering authoritative and relevant GEOINT at the point of need.

## St. Louis Area Working Group

**Chairs:** Justin Bennett (GeoData IT), Andy Dearing (Spatial STL Advisors), Tara Mott (Esri), and Sekhar Prabhakar (CEdge Software Consultants)

The SLAWG brings together professionals from the government, military, industry, academia and community to create lasting educational and community pathways to geospatial degrees, certifications and/or careers in the St. Louis region. The working group works to support and build new geospatial-centric pipelines that integrate and amplify existing NGA efforts designed to educate and train individuals from the greater St. Louis area and surrounding region. The end goal of this work is to grow and sustain a populace within St. Louis and surrounding regions that possess the necessary geospatial skillsets to qualify for and fill existing and future NGA or Industry technical, analytic and management careers. This working group is based in St. Louis.

- Contributed to the 2019 State and Future GEOINT report on an article focused on "Open-Source Collaboration as a Model to Supercharge GEOINT Success."
- Helped plan the content and agenda for the USGIF Geospatial Gateway Forum, which had an attendance of more than 300 individuals.
- Held its monthly meeting at the GEOINT 2019 Symposium to promote the working group and invited St. Louis leaders to discuss the work around the GEOINT workforce development in the city.

## Young Professionals Working Group

**Chairs:** Marisa Hess (Strategic Alliance Consulting Inc), Lidia Lopez (NGA), and Bill Pilotte (ISPA Technology)

The YPWG is dedicated to promoting, supporting and encouraging active involvement in the Young Professionals Group (YPG). The YPWG guides the YPG by developing projects and activities for geospatial intelligence young professionals, and encouraging active involvement in the community.

- Established three new YPG "chapters" in Ann Arbor, Mich.; Melbourne, Fla.; and St. Louis, Mo., which are run by YPG volunteers.
- Selected 30 individuals as part of the GEOINT 2019 Symposium Golden Ticket Program.
- Hosted YPG Third Thursday networking events, an Acquisition 101 series, and volunteered at two community STEM events.



# OUTREACH & COMMUNITY ENGAGEMENT



*Dr. Annette J. Krygiel (middle) was awarded the 2019 USGIF Lundahl-Finnie Lifetime Achievement Award at the GEOINT 2019 Symposium.*



# 2019 Arthur C. Lundahl-Thomas C. Finnie Lifetime Achievement Award Recipient

The USGIF Board of Directors presents this award annually to an influential member of the GEOINT Community who has dedicated much of his or her life's work to the tradecraft. USGIF announced **Dr. Annette J. Krygiel** as the 2019 recipient of the Foundation's Arthur C. Lundahl-Thomas C. Finnie Lifetime Achievement Award. Krygiel is the 15th individual to receive this prestigious award and was recognized on stage during USGIF's GEOINT 2019 Symposium general session.

*"I am surprised, stunned, and deeply honored to receive the Lundahl-Finnie award. I am also very humbled at this connection to two great visionaries who enabled geospatial intelligence capabilities critical to our nation. My own career has been framed by their organizations, by people they mentored, and to some extent by strategies they employed. I am immensely grateful to the USGIF Board for this recognition and for including me among such distinguished awardees."*

- Dr. Annette J. Krygiel



## 2019 Awards Program

The USGIF Awards Program annually recognizes the exceptional work of the geospatial intelligence tradecraft's brightest minds. The awards are presented during the GEOINT Symposium. Anyone in the Community may nominate an individual or a team for an achievement award.

### ACADEMIC



Aaron Gerace and Matthew Montanaro, Rochester Institute of Technology

### COMMUNITY SUPPORT



Taking Autism To The Sky, Inc.

### GOVERNMENT



Rachael Brady, CAL FIRE

### INDUSTRY



Jeffrey D. Clark, Ph.D., Riverside Research

### MILITARY



GUARDIAN Team, National Guard Bureau



# K-12 STEM Education and Outreach

The Foundation's K-12 Program aims to foster general awareness of GEOINT and the myriad career opportunities the field offers.

## Portable Planet

Portable Planet is a 35-by-26-foot vinyl floor map designed for children and teachers to walk on, engage with, and explore its many features to complete geography and geospatial activities. The map, which is now available for schools and after-school programs to rent, was used by more than 950 students in 2019.

**In 2019, Portable Planet traveled to:**

- Creighton's Corner Elementary School in Ashburn, Va.
- GEOINT 2019 Symposium in San Antonio, Texas
- Marshall Elementary School in Manassas, Va.
- Moorefield Station Elementary School in Ashburn, Va.
- NGA Family Day at the NGA Campus East in Springfield, Va.
- Palmetto Cybersecurity Summer Camp in Summerville, S.C.
- STEMulate St. Louis at Saint Louis University in St. Louis, Mo.



## STEMulate St. Louis

USGIF hosted its second K-12 STEM event for students, families, and teachers in St. Louis, Mo. The evening included hands-on, interactive activities and demonstrations from 12 organizations local to St. Louis. More than 300 people attended.

## K-12 Subcommittee of the Academic Planning Committee

This subcommittee guides USGIF's promotion of geographic literacy and GEOINT awareness among K-12 students, educators, and families.

## Project-Based Learning

USGIF teamed with John Champe High School in Aldie, Va. to assist in a project-based learning (PBL) project that focused on identifying pollutants in Loudoun County. With the help of Esri, the Foundation collaborated with junior and senior students in the AP environmental science and computer sciences classes.



## GEOINT 2019 K-12 Program

USGIF invited 50 San Antonio-area students to experience GEOINT in action.

**Activities Included:**

- USGIF's Portable Planet
- Exhibit hall booth tour
- A presentation by government, industry, and academia leaders on STEM careers





## Intro to GEOINT

USGIF's "Intro to GEOINT" presentation provides an interactive overview of the GEOINT discipline. USGIF staff as well as dedicated volunteers share the presentation with schools across the country, and reached more than 1,000 students in 2019.

## Community STEM Events

The Foundation participated in events that promoted science, technology, engineering, and mathematics (STEM). Events include the Dyslexic Edge 2019: Pathways to STEM Excellence Conference and STEM Festival at George Mason University in Fairfax, Va.; the K-12 STEM Symposium at the Nysmith School in Herndon, Va.; and NGA's Family Day at the NGA Campus East in Springfield, Va.

USGIF collaborated with LearningPlunge's GeoPlunge Tournament in Washington, D.C., through which 180 students from 21 schools competed in the geography card game.

## Science Fairs

USGIF awarded \$1,000 in science fair prizes at the Fairfax and Loudoun County Regional Science Fairs.



### THANKS TO 2019 USGIF K-12 ACTIVITIES SUPPORTING PARTNERS

AGI	Esri	Planet
BAE Systems	Forsyth School	SAIC
The Baryons	L3Harris Technologies	Saint Louis University
Boeing Intelligence & Analytics	LaunchCode	Washington University in St. Louis
CEdge Software	NGA	



# GEOINT 2019 Symposium Student Assistant Program



The Student Assistant Program is a fantastic opportunity for students from USGIF-accredited or affiliated schools to experience the GEOINT Symposium. These volunteers assisted with training, answering attendee questions, and more. Students also had the opportunity each day to attend Symposium events as well as to network with GEOINT professionals.

## USGIF hosted 20 volunteers from 14 schools at the GEOINT 2019 Symposium

### SCHOOLS REPRESENTED

Fayetteville State University	Pennsylvania State University
George Mason University	University of Maryland, College Park
James Madison University	University of North Carolina Wilmington
North Carolina Central University	University of Southern California
Northeastern University	University of Texas at Dallas
NOVA Information Management School,	University of Utah
Universidade Nova de Lisbon	West Virginia University
Ohio Northern University	

## Trajectory Event Center



USGIF opened its own state-of-the-art event space, known as the Trajectory Event Center (TEC), in Herndon, Va. The TEC will be a year-round resource for the geospatial intelligence community, and any organization interested in hosting events in the Dulles Technology Corridor. It is an ideal location to host corporate events, training, sales meetings, product launches, receptions, table-top exhibits, hack-a-thons, and much more.

- Flexible meeting spaces for up to 250 people
- Cutting-edge audio-visual technology
- Live streaming capabilities
- Full-day, half-day and week-long rentals
- Free WiFi and parking



## In Other USGIF News

- USGIF celebrated its 15th anniversary!
- USGIF welcomed several new employees: Danica Giermann, Digital Marketing Coordinator; Casey Irelan, Manager, Business Development and Events; Alicia Jackson, Membership Services Manager; and Christine MacKrell, M.S., Education & Professional Development Coordinator.
- Dr. Camelia Kantor, together with three other accredited program representatives, contributed a chapter on digital earth and GEOINT as part of the Manual of Digital Earth publication.
- Jeff Ley was appointed to the Explore St. Louis National Customer Advisory Board. The advisory board is made up of meeting professionals representing a cross-section of organizations including associations, corporations and third parties to provide St. Louis industry leaders insights and feedback to bring visitors to the city.
- USGIF partnered with INSA for the “Mid-Career Reboot: Challenges and Choices” event on July 22, 2019 in Arlington, VA.
- USGIF participated in GIS Day events at George Mason University.
- USGIF participated in NGA Professionals Network’s (NPN) annual Interagency Mentoring and Collaboration Workshop
- USGIF sponsored or exhibited at:
  - 2019 American Association of Geographers Annual Meeting
  - Adobe Digital Government Symposium
  - 2019 Esri Federal GIS Conference
  - 2019 Esri User Conference
  - Geography 2050





# FUNDRAISING



USGIF's EdGEOcation Giving Fund helps the Foundation visit schools and provide geospatial learning materials for students and teachers.



# EdGEOcation Giving Fund

The giving fund is a way for GEOINT supporters to give back and help USGIF's K-12 educational programming.

## Donations Directly Support

- Providing Intro to GEOINT presentation materials to classrooms,
- Sponsoring STEM events and judging science fairs,
- Developing and delivering learning materials for broad use,
- Purchasing and donating Earth science and geography materials to underserved schools,
- Collaborating with USGIF Organizational Members and partners to provide hands-on learning activities.

## 2019 Giving Campaign

In October, USGIF launched its fourth EdGEOcation Giving Campaign. The campaign, which ran from October 2019 to January 2020, **generated a total of \$10,043.**



#Give4GeoEd

# The Giving Fund Raised \$15,766 in 2019

## GEOINT 2019 Symposium

USGIF launched a donation campaign at GEOINT 2019. The Foundation introduced the DipJar, a convenient way to simply “dip” your credit card to automatically donate \$25 to the campaign. USGIF raised \$5,750 at the four-day Symposium.





# PUBLICATIONS

# 20,000+

receive the *trajectory* enewsletter

## GEOINT 2019 Show Daily

Trajectory magazine's award-winning *Show Daily* produced 99 pages of content in five days.

THE GEOINT 2019 SYMPOSIUM SUNDAY JUNE 2, 2019

# SHOWDAILY

BROUGHT TO YOU BY USGIF'S TRAJECTORY MAGAZINE

### Quantum Leaps

GEOINT FOREWORD SPEAKERS BO EWALD AND WILLIAM HURLEY TO DISCUSS HOW QUANTUM COMPUTING CAN PROPEL THE GEOINT COMMUNITY INTO THE FUTURE  
By Scott Mason

**G**EOINT Foreword 2019 promises an exciting line-up of speakers, including two individuals at the forefront of quantum computing and its potential application to the geospatial intelligence field. The *GEOINT Symposium Show Daily* spoke with the founder of ColdQuanta, Inc., and William Hurley of Strategovis, Inc., who will both give keynote addresses Sunday, to learn more about their upcoming presentations.

**UNPRECEDENTED POTENTIAL FOR PNT**

Bo Ewald has long been part of the advanced computing industry. He started his career at Los Alamos National Laboratory, where under his watch it became one of the most powerful scientific and engineering computing facilities in the world. Since then, he has been involved with several high-performance computing companies, including being president of Cray Research and CEO of Silicon Graphics. He currently serves as president and CEO of ColdQuanta, Inc., in Boulder, Colo.

"In my career, we've provided conventional and quantum systems for companies like Lockheed Martin, Google, and NASA," Ewald said. "And I've participated in several GEOINT meetings over the years, so I'm quite familiar with many of the topics and attendees at the conference."

In his keynote, Ewald plans to give a brief introduction to quantum mechanics, including some basics and a history of the field, before diving into more detail about the potential application of a set of quantum technologies and high-powered computing for the GEOINT Community.

"To borrow from Winston Churchill, 'We're coming to the end of the beginning' of quantum computing. It's really an exciting time in the field," he explained.

Ewald detailed the use of quantum devices for advancement in positioning, navigation, and timing. "With quantum technology, you can create devices that provide more accurate timing than we have today, even more precise than the NIST-F1, the cesium fountain atomic clock in Boulder, Colo," he said. "This new clock and technologies will be so

Bo Ewald of ColdQuanta, Inc., is an advanced computing expert and hobby pilot.

"To borrow from Winston Churchill, 'We're coming to the end of the beginning' of quantum computing. It's really an exciting time in the field."

—BO EWALD, COLDQUANTA, INC.

> see Quantum Leaps p. 36

DOWNLOAD THE OFFICIAL  
**GEOINT 2019 SYMPOSIUM APP**  
for the most up-to-date  
event information

Mobile App Sponsor

here

Available through the iTunes and Google Play app stores.

## 2019 STATE AND FUTURE OF GEOINT REPORT

USGIF United States Geospatial Intelligence Foundation

2018 ISSUE 1

# trajectory

THE OFFICIAL MAGAZINE OF THE UNITED STATES GEOSPATIAL INTELLIGENCE FOUNDATION

## An Open Frontier

Open-source software has reached a tipping point. Why embracing an open community approach will enable a new generation of GEOINT.

> The Changing Nature of GIS  
> Perspective: Ivan DeLoatch, Federal Geographic Data Committee

## State and Future of GEOINT Report

USGIF's annual State and Future of GEOINT report is an unclassified collection of articles by volunteer authors intended to foster knowledge sharing and discussion about the future of the global GEOINT Community. 2019 marked the first time USGIF sourced the articles in its report entirely from a virtual call for abstracts. The response was overwhelming, leading to the largest number of articles ever published in one year – 21. Subjects included machine learning & AI, mixed reality, open-source software, and much more. The report also explored GEOINT's role in adjacent industries and causes such as economics, nonproliferation, and infrastructure. Subjects included machine learning & AI, mixed reality, open-source software, and much more. The report also explored GEOINT's role in adjacent industries and causes such as economics, nonproliferation, and infrastructure.



# Trajectory

*Trajectory*, the official magazine of USGIF, is a multi-channel content platform that strives to provide high-level thought leadership for USGIF members as well as the overall defense, intelligence, homeland security, and commercial GEOINT communities. *Trajectory* focuses on the future of GEOINT, and its goal is to be the preeminent resource on issues of significance to the global GEOINT Community.

In 2019, *trajectory* produced feature articles on:

- Open-Source Software
- The Future of GIS
- Arctic GEOINT
- Blockchain & Location
- Commercial Airborne ISR
- Urban & Underground Warfare
- GEOINT's Next Generation

**16,500+** subscribe to the print edition of *trajectory* magazine



## In 2019:

- 199 articles were posted on the *trajectory* website.
- The *trajectory* website had nearly 90,000 visits by approximately 67,000 users.

## As a result of reading *trajectory*:

- 48% of readers have attended a USGIF event
- 35% of readers have recommended USGIF membership to a colleague
- 59% of readers discussed or shared an article with a colleague



# FINANCIAL REPORT

Build the Community | Accelerate Innovation | Advance the Tradecraft

USGIF  
United States Geospatial Intelligence Foundation  
Work smarter. Connect better. Advance the tradecraft.

I ♥ G

TELL US  
LOVE

MAPS  
CODIFY  
EXISTENCE

GEOSPATIAL  
INTELLIGENCE  
FOR EVERYONE

MAXAR

KELLY

USGIF



USGIF

HOWDAILY

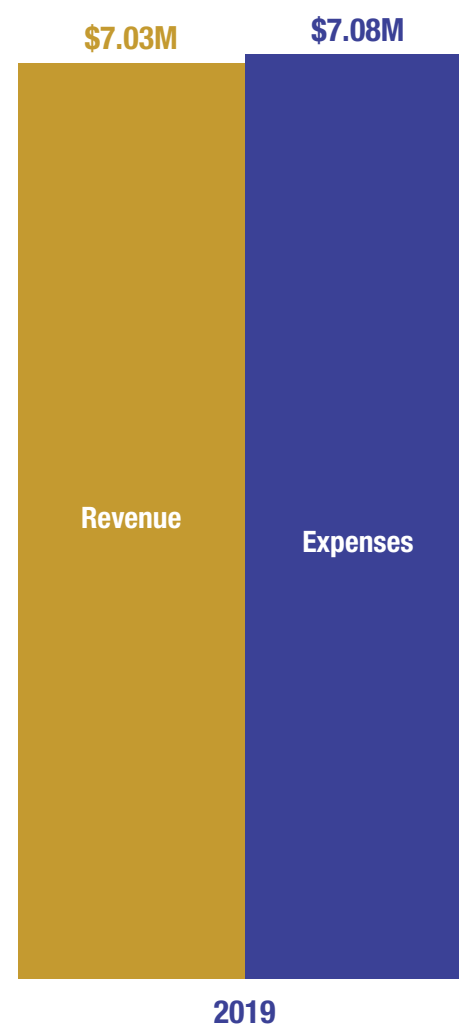
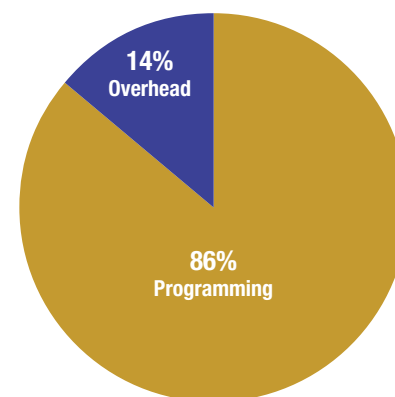


# Financial Report

## Revenue & Expenses

For fiscal year 2019, ending June 30, 2018, USGIF saw an increase revenue in all areas. Both revenues and expenses were increased with added events. Academic revenue and expenses were both down.

Year Ended June 30, 2019	2019	2018
<b>Revenue</b>		
Convention and trade show	\$4,966,729	\$4,961,786
Membership dues	1,179,737	1,197,534
Events	557,779	472,332
Other revenue	160,986	37,657
<i>trajectory</i> magazine	153,454	145,208
Academic Programs*	12,139	86,011
<b>Total revenue</b>	<b>7,030,824</b>	<b>6,900,528</b>
<b>Expense</b>		
<b>Program services</b>		
Convention and trade show	4,427,837	4,804,673
Events	622,275	480,524
Membership Services	434,004	335,373
Academic Programs*	332,227	433,078
<i>trajectory</i> magazine	304,680	264,975
<b>Total program services</b>	<b>6,121,023</b>	<b>6,318,623</b>
<b>Supporting services</b>		
General and administrative	962,678	866,160
<b>Total expense</b>	<b>7,083,701</b>	<b>7,184,783</b>
Change in net assets before investment income	(52,877)	(284,255)
Investment income	54,301	20,288
<b>Change in net assets</b>	<b>1,424</b>	<b>(263,967)</b>
Net assets, beginning of year	3,089,630	3,353,597
<b>Net assets, end of year</b>	<b>\$3,091,054</b>	<b>\$3,089,630</b>



USGIF's fiscal calendar ends June 30; FY19 financials are reported for July 1, 2018, through June 30, 2019.

\*100% of scholarship donations are distributed.



# MEMBERSHIP



*"We decided to become a USGIF Strategic Partner due to the importance of GIS solutions in the digital revolution we are experiencing in every industry Jacobs serves."*

*- Darren Kraabel, Senior Vice President  
of Mission Systems, Jacobs*

*"USGIF events allow us to bring our message to the various communities USGIF serves."*

*- Jill Singer, Vice President,  
National Security, AT&T*

*"USGIF provides our team a unique lens through which to spot relevant industry trends and gain valuable insights."*

*- Harold "Andy" Goodson, CEO, Connextra*

*"I joined several years ago for two reasons. First, I wanted to be able to participate in the GEOINT Symposium and other USGIF activities to interact with the GEOINT Community we had been working with at NGA since 2008. Second, I wanted to be active in USGIF's Small Business Advisory Working Group (SBAWG), which I chaired for four years. The road for small businesses is hard. USGIF and the SBAWG provide access to decision-makers and leaders. So, you have a chance of getting your brand, company, and services out there."*

*- Kathy Pherson, CEO, Pherson Associates*

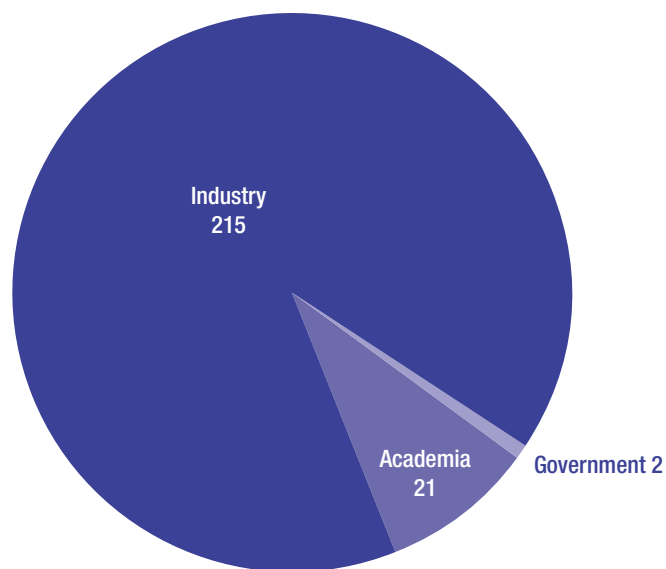
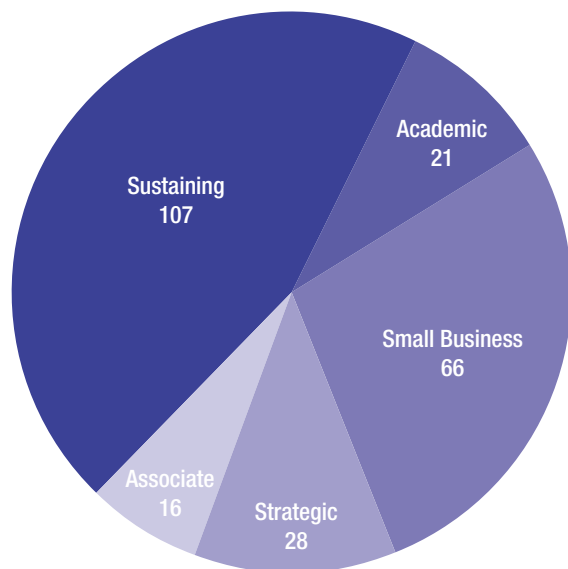


# Organizational & Individual Membership

USGIF offers Organizational and Individual Memberships, each of which provides its own unique set of benefits to different subsets of the GEOINT Community.

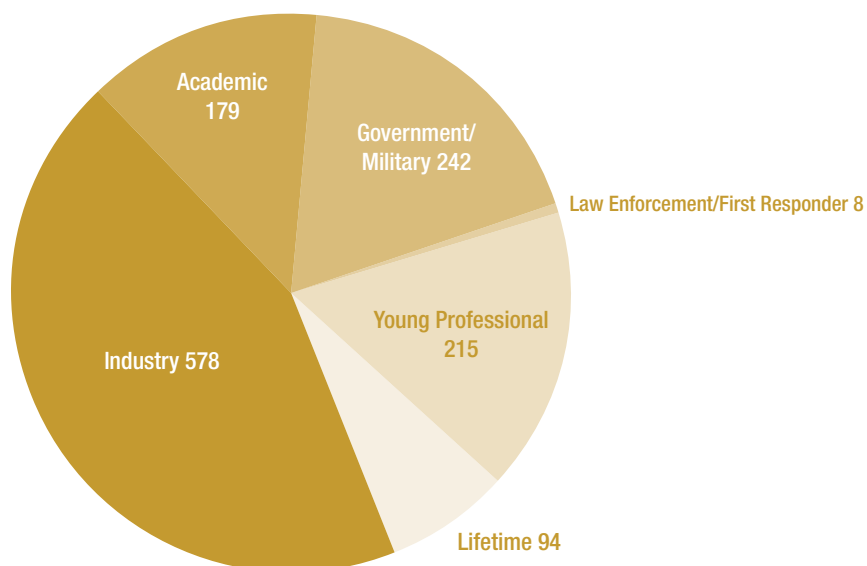
## 238 Organizational Members

**Organizations** seeking to establish themselves as thought leaders in the GEOINT industry, raise brand awareness, or participate in the GEOINT Symposium are well served by becoming Organizational Members.



## 1,316 Individual Members

**Individual** Membership provides opportunities to network, stay informed of the latest industry trends, and receive discounted or complimentary event attendance.



\*All membership data as of January 1, 2020.



# Organizational Members

## STRATEGIC PARTNER

					
	Booz   Allen   Hamilton	   			
		   US FEDERAL			
					
					

## ASSOCIATE PARTNER

Amentum (formerly AECOM)  
AT&T Global Public Sector  
Centauri (formerly Integrity Applications Inc (IAI))  
Dell EMC  
Deloitte  
Dewberry  
ICES Inc.  
InTec LLC  
ManTech International Corporation  
Next Tier Concepts (NT Concepts)  
Planet  
Riverside Research  
SAP National Security Services (SAP NS2)  
The Aerospace Corp.  
Vricon  
Woolpert

## SUSTAINING PARTNER

3GIMBALS LLC  
AEVEX Intelligence Solutions  
Airbus  
Altamira Technologies Corp.  
Amazon Web Services  
Applied Imagery  
Applied Insight  
Axiologic Solutions LLC  
Basis Technology  
BlackSky  
CA Technologies  
CAE  
Cisco Systems Inc.  
Civil Applications Committee  
Cloudera Government Solutions  
CMX Technologies, an Xator Corp.  
Compass Inc.  
Compusult Ltd.

Concurrent Technologies Corporation  
Continental Mapping Consultants  
CSTARS - University of Miami  
Cubic Corporation  
Descartes Labs  
Digital Element  
DLT Solutions  
Dynamic Graphics Inc.  
e-GEOS  
Eagle Ray  
Earth Observing System  
East View Geospatial  
Elasticsearch Federal Inc.  
Envitia  
Equinix  
Extensis  
F5 Networks Inc.  
Fortinet  
Freedom Consulting Group

General Atomics Electromagnetic Systems Group  
Gitlab  
Global Marketing Insights Inc.  
Guidehouse  
HERE North America  
Hexagon Geospatial  
HHB Systems  
HP Inc.  
Huntington Ingalls Industries  
i3ICS  
In-Q-Tel  
Information International Associates  
Japan Maintenance & Operation Service Corporation  
Kitware Inc.  
Kleos Space  
Kongsberg Geospatial  
Mapbox



MapLarge  
 MarkLogic Corp.  
 Mellanox Federal Systems  
 Micron Technology  
 Microsoft Corporation  
 Modern Technology Solutions, Inc.  
 Neo4j  
 NetApp  
 NewBridge Partners Inc.  
 Next Century Corp.  
 NJVC LLC  
 Noblis  
 NVIDIA Corp.  
 Observera Inc.  
 Octo Consulting Group Inc.  
 OmniSci  
 Open Geospatial Consortium Inc.  
 Orbit Logic Incorporated  
 Orbital Insight Inc.  
 PAR Government Systems Corp.  
 PIXIA Corp.  
 Presagis  
 ProCleared LLC  
 PTFS  
 Pure Storage  
 Quadrant Inc.  
 Radiance Technologies  
 Rafael Advanced Defense Systems  
 Recorded Future  
 Red Hat  
 Rubrik Federal  
 S2 Analytical Solutions  
 Safe Software Inc.  
 Sierra Nevada Corp.  
 Skyline Software Systems Inc.  
 SOS International Inc.  
 Spatial Networks  
 Spire Global  
 SRC Inc.  
 SRI International  
 Stellar Solutions Inc.

Tableau Software  
 Technology Entrepreneur Center Inc.  
 (T-REX)  
 Tenax Aerospace LLC  
 TerraGo Technologies  
 The MITRE Corp.  
 The Potomac Advocates  
 The Sanborn Map Company Inc.  
 Thinklogical, A Belden Brand  
 Trinity Global Consulting  
 Westway Workplace  
 Wiser Imagery Services  
 World Wide Technology

## ACADEMIC PARTNER

Alaska Satellite Facility  
 Delta State University  
 Fayetteville State University  
 George Mason University  
 Georgia Tech Research Institute  
 Indiana University of Pennsylvania  
 James Madison University  
 Johns Hopkins University  
 MIT Lincoln Laboratory  
 North Carolina Central University  
 Northeastern University  
 NOVA Information Management  
 School  
 Penn State University  
 Saint Louis University  
 Space Dynamics Laboratory  
 UNC Wilmington  
 University of Maryland, Center for  
 Geospatial Information Science  
 University of Missouri - Center for  
 Geospatial Intelligence  
 University of South Carolina  
 University of Southern California,  
 Spatial Sciences Institute  
 University of Texas at Dallas

## SMALL BUSINESS PARTNER

372 Consulting  
 Allen Integrated Solutions  
 AllSource Analysis  
 Analytic Folk  
 Authentic8  
 Bana Solutions  
 BigBear Inc.  
 Capella Space Corporation  
 Cardio Logic Inc.  
 CCRi  
 Cesium  
 ColdQuanta  
 Connexa  
 Crunchy Data  
 DAn Solutions  
 DataRobot Inc.  
 DataStax  
 Diffeo  
 Earth-i  
 Earthcube  
 Edgeworthbox Inc.  
 Fraym  
 Geo Owl  
 Geodata IT LLC  
 GeoNorth  
 GeoSolutions  
 The Globe Building  
 Grover Consulting Services  
 HawkEye 360 Inc.  
 HyperSat Systems  
 InQuisient  
 InSequence  
 Integrated Intel Solutions  
 International Spy Museum  
 ISPA Technology  
 KaDSci LLC  
 KELYN Technologies  
 Knowledge Link Inc.

Lowe Engineers, LLC  
 Meadowgate Technologies  
 Modus Operandi  
 Nelson Intelligence Solutions  
 New Light Technologies  
 NextFED Inc.  
 NuWave Solutions  
 Percipient.ai  
 Pherson Associates  
 PixElement  
 Prominent Edge, LLC  
 RAZR Solutions LLC  
 Reinventing Geospatial Inc.  
 Skyris LLC  
 SPEC Innovations  
 St. Louis Regional Economic  
 Development Alliance (AllianceSTL)  
 T-Kartor USA  
 TCarta Marine LLC  
 TeachMeGIS  
 Terran Orbital  
 Tesla Government Inc.  
 Trusted Knowledge Options Inc.  
 Unearthed Land Technologies LLC  
 Ursa Space Systems Inc.  
 VATC-Visual Assurance Technical &  
 Consulting  
 Video Inform  
 Vision Engineering  
 Wasabi Technologies Inc.



# USGIF Board of Directors

**USGIF Chairman of the Board**  
**The Honorable Jeffrey K. Harris**  
JKH Consulting LLC

**Julia Bowers**  
Chief Technologist, Booz Allen Hamilton

**Kate Dargan**  
Co-founder, Chief Strategist, Intterra Group

**Al Di Leonardo**  
Veteran, Entrepreneur

**John Fenwick**  
Technology Development & Operations Executive

**Paul L. Graziani (Director Emeritus)**  
Chief Executive Officer & Co-Founder, Analytical Graphics Inc.

**Joshua Hartman**  
Vice President, Geost, Inc.

**Marisa Hess**  
Geospatial Data Manager, Strategic Alliance Consulting Inc.

**Jeff Jonas**  
Founder and Chief Scientist, Senzing

**Brig. Gen. Michael G. Lee, USAF, Ret.**  
Senior Vice President, Quadrint

**Letitia A. Long**  
Former Director, NGA; and Chairman of the Board, INSA

**Keith J. Masback**  
Owner, Plum Run, LLC

**Dr. L. Roger Mason Jr.**  
President, Space, Intelligence and Cyber Sector, Peraton

**Carmen Medina**  
Founder, MedinAnalytics

**Patty Mims**  
Director, Global National Government, Esri

**Stephen S. Oswald**  
Founding Partner, SYZYGY Enterprises

**William Pilotte**  
Director of Business Strategy, ISPA Technology

**K. Stuart Shea (Director Emeritus)**  
Chairman, President & Chief Executive Officer, Peraton

**Dr. Christopher K. Tucker**  
Principal, Yale House Ventures

## Board Advisors

**Dr. Stacey A. Dixon**  
Deputy Director, NGA

**Lidia Lopez**  
GEOINT Analyst, Office of Geography, NGA

## USGIF Staff

**Stephen S. Oswald**  
Interim Chief Executive Officer

**Karin Soyster Fitzgerald, CMP, CAE**  
Chief Operating Officer

**Camelia M. Kantor, Ph.D.**  
Vice President of Academic Affairs

**Jeffrey T. Ley, CEM, CMM**  
Vice President of Business Development & Exhibitions

**Ronda Schrenk**  
Vice President of Programs

**Shameka Jordan**  
Director of Marketing

**Shai Sobrino**  
Director of Operations

**Ashley Sievert, CEM, CMP, CTSM**  
Senior Manager, Exhibit & Sponsorship Services

**Julia Vanarsdall, CMP**  
Senior Manager, Meetings & Events

**Casey Irelan**  
Manager, Business Development & Events

**Alicia Jackson**  
Membership Services Manager

**Lindsay Mitchell**  
Programs Manager

**Kelly Palmer**  
Trajectory Event Center Manager

**Danica Giermann**  
Digital Marketing Coordinator

**Christine MacKrell, M.S.**  
Education & Professional Development Coordinator



# THANK YOU

for supporting USGIF through  
your membership, donations,  
sponsorships, volunteering, and  
involvement. Our success is truly  
a result of your commitment to  
the GEOINT Community.



*USGIF Staff*

## CELEBRATING 15 YEARS





**United States Geospatial Intelligence Foundation**

**Build the Community | Advance the Tradecraft | Accelerate Innovation**

The only organization dedicated to promoting the geospatial intelligence tradecraft and building a stronger community of interest across industry, academia, government, professional organizations, and individuals.

13665 Dulles Technology Drive, Suite 100, Herndon, VA 20171 • 888.MY.USGIF • [usgif.org](http://usgif.org)

