AWARDS AND SCHOLARSHIPS
Awards for Outstanding Papers, Professional Achievement, and Service activities are determined by committee selection; scholarships and academic awards are also determined by committee selection but are chosen from among current applications. For details on the application process, see: https://www.asprs.org/education/asprs-awards-and-scholarships

Plenary Session, 5PM–5:30PM
Lifetime Achievement Award
Photogrammetric Fairchild Award
Outstanding Technical Achievement Award

Wednesday, March 25th Annual Business Meeting and Installation of Officers, 11:00AM-12:00PM
Presidential Citations
Fellow Award
Outstanding Service Award
Recognition of Retiring Members of Board of Directors
Recognition of Retiring Division Directors
Installation of New Division Assistant Directors
Installation of New Division Directors
Installation of New Council Chairs
Tellers Committee Report
Installation of Officers
Vice-President  Christopher Parrish
President-Elect  Jason Stoker
President  Jeff Lovin

Scholarships and Outstanding Paper Awards

Scholarships
Robert E. Altenhofen Memorial Scholarship
Abraham Anson Memorial Scholarship
John O. Behrens ILI Memorial Scholarship
Robert N. Colwell Memorial Fellowship
William A. Fischer Memorial Scholarship
Francis H. Moffitt Memorial Scholarship
Kenneth J. Osborn Memorial Scholarship
Ta Liang Memorial Award
Paul R. Wolf Memorial Scholarship

Outstanding Paper Awards
John I. Davidson President’s Award for Practical Papers
The Esri Award for Best Scientific Paper in GIS
Talbert Abrams Award
Region Awards
Roger Hoffer Membership Award
Introduction of the current Rising Stars
Dr. Marguerite Madden is a Professor in the University of Georgia (UGA) Department of Geography and Director of the Center for Geospatial Research (CGR). She holds Bachelor and Master of Arts degrees in Biology from the State University of New York (SUNY) and Ph.D. in Ecology from the University of Georgia. Her research interests combining geographic information science with landscape ecology with particular focus on mapping and analyzing human-animal-environment interactions, began as an 11-year old assistant to her father who was a land surveyor in northern New York. In college, she mapped wetlands from aerial imagery in the Lake Champlain Valley and Adirondack Mountains with her colleagues in the Center for Earth & Environmental Science at SUNY Plattsburgh. After working for two years in road construction as an Engineer’s Assistant, she joined the UGA Center for Remote Sensing and Mapping Science (CRMS) in 1985 working under the direction of CRMS Director, Dr. Roy Welch. She completed her Ph.D. in Ecology in 1990, was a CRMS Postdoctoral Researcher (1990-1991) and held a Research Scientist position in the CRMS from 1991-2003. Following the retirement of Dr. Roy Welch, she served as the CRMS Interim Director and was appointed Director and Associate Professor in the UGA Geography Department in 2005 with promotion to Full Professor in 2008. For 30 years, she and her colleague, CRMS Associate Director, Dr. Thomas Jordan, developed and analyzed numerous detailed vegetation databases for local, state and national conservation lands, including over 20 National Park units located throughout the Southeastern United States. Her current research with CGR Associate Director, Dr. Sergio Bernardes, Research Scientist, Dr. David Cotten, and numerous affiliated faculty, staff and students involves remote sensing, GIS, spatio-temporal analysis, geovisualization and geographic object-based analysis as applied to landscape-scale biological/physical processes and human-animal impacts on the environment. She and her colleagues have obtained 64 external grants since 1989 totalling over 9.67M$ and have published over 75 peer-review journal articles and book chapters. She is the editor or co-editor of 17 books, proceedings and special issues of journals, serves on the Editorial Boards of 5 geospatial journals and was the Associate Editor of Wetlands, Wetlands, Ecology and Management and the ISPRS Journal of Photogrammetry and Remote Sensing. Prioritizing the involvement of students in her research, she has served as major advisor to 21 Ph.D. and 19 M.S./M.A. students since joining the UGA faculty in 2005. Professor Madden is an American Society of Photogrammetry and Remote Sensing (ASPRS) Past President and Editor of the 2009 ASPRS Manual of GIS. She served as the International Society for Photogrammetry and Remote Sensing (ISPRS) Commission IV, “Digital Mapping and Geodatabases” Technical President (2008-2012), ISPRS Council Second Vice President (2012-2016) and Treasurer of The ISPRS Foundation (2010 to present). She is the lead Science Advisor of the Georgia node of the NASA DEVELOP National Program (2014 to present) and the recipient of the ISPRS Willem Schermerhorn Award (2004), ASPRS Fellow Award (2010), ASPRS SAIC Estes Memorial Teaching Award (2011) and NASA Silver Achievement Medal (2018).

The ASPRS Lifetime Achievement Award (formerly the Honorary Lifetime Achievement Award and the Honorary Member Award) is the highest award an ASPRS member can receive, and there are only 25 living Lifetime Achievement Awardees of the Society at any given time. Candidates are chosen by a Nominating Committee made up of the past five recipients of the award and chaired by the most recent recipient.

Purpose: Initiated in 1937, this life-time award is given in recognition of individuals who have rendered distinguished service to ASPRS and/or who have attained distinction in advancing the science and use of the geospatial information sciences. It is awarded for professional excellence and for at least 20 years of service to ASPRS and consists of a plaque and a certificate.

Donor: ASPRS

The 2020 Photogrammetric Award (Fairchild) is presented to Jie Shan in recognition of his lifelong contribution to the science and art of photogrammetry, remote sensing, and image interpretation.

Dr. Shan is a Professor at the Lyles School of Civil Engineering. His primary research field is image- and lidar-based geospatial data processing, analysis and modeling. During his decades long career experience, he has made original contributions in several academic subject areas and provided long time, consistent technical services to our societies and communities. He is a leader in automated object extraction from images and point clouds. The work pushes the knowledge boarder of traditional photogrammetry. He has led developing and applying novel analytical and statistical methods for various topographic imagery and lidar data collected from space, air, ground, and handheld sensors. The results of these efforts were published in top journals of related subjects. He has received a number of ASPRS Best Paper awards and was elected an ASPRS Fellow. He is the P&RS Highlight Article Editor, serves on the Editorial boards of IEEE Transactions of Geoscience and Remote Sensing, International Journal of Remote Sensing, and Remote Sensing.

Purpose: The Photogrammetric Fairchild Award is designed to stimulate the development of the art of aerial photogrammetry in the United States. Practicability is the essence of the Award and is the basis for the review of all candidates.

Donor: ASPRS

The award consists of an engraved presentation plaque.
ASPRS Outstanding Technical Achievement Award

2020 recipients: USGS Digital Orthoquad (DOQ)

Technical Team: David Hooper (RIP), Lyman Ladner, George Lee and Randle Olsen.

Using mathematics to differentially rectify pixels in digitized or digital imagery to produce image maps, with an approach that continues to impact remote sensing and GIS processes, was developed at the USGS Western Mapping Center. In 1986 a prototype digital orthophoto quadrangle (DOQ) production system launched an effort that not only improved USGS support to the federal civil mapping community but also stimulated an initiative within the Department of Defense. This award recognizes the innovative drive of the initial proposal that was a turning point in the use of digital imagery and which laid the groundwork for today’s democratization of imagery and remote sensing use and GIS.

Description of the achievement:
The concept of utilizing the technique to produce image maps in a format that was useful to a wide array of applications was first identified at USGS Western Mapping Center (WMC) by Randy Olsen. Shortly afterward, Randy transferred to USGS headquarters but left behind a good deal of the math and basic concepts with George Lee and other key personnel located there. Those individuals began exploring options to operationalize the concepts, but quickly ran into a number of challenges. Without digital imagery at a resolution suitable for Quads, the only source available was scanned analog imagery. And the availability of micron-level scanners required for an acceptable ground resolution from available image sources was limited. Given no production software to manipulate the pixels, George Lee enlisted the efforts of Dave Hooper to produce that software utilizing Randy’s math models. Lyman Ladner, another key player at WMC, worked with the software and incoming imagery and was successful in creating the earliest demonstration products.

The earliest digital orthoquad (DOQ) images were produced at 2-meter ground sample distance (GSD) and stored on reels of 9-track tapes. Neither was considered ideal but, at this point, the process worked and limited demonstration images were produced. While National High Altitude Photography (NHAP) collection was used for some of the earliest demonstrations, the National Aerial Photography Program (NAPP) would eventually become the preferred image source for a digital orthophoto program. More recently NAPP has been replaced by the National Agricultural Imagery Program (NAIP).

The ongoing interagency aerial photography coordination effort had resulted in a very close working relationship with USDA, and especially with Gale Etsell, who was introducing analog image-based mapping combined with GIS technologies to what was then the Soil Conservation Service (SCS).

Due to the complexity of the production processes, USGS and USDA were still pushing the state-of-the-art, and given the political pressures coming from the private sector, they decided to develop the program utilizing primarily a qualifications-based selection (QBS) contracting strategy, even though QBS was highly resisted inside the civilian mapping agencies at that point. This approach would lead to a significant infusion of technical and technology capability into the commercial high-resolution image mapping/processing sector. with numerous representatives of private firms visiting WMC to obtain the technology necessary to produce the DOQs.

Millions of users today view digital ortho imagery daily from a variety of sources in hand held devices, taking the images for granted and never imagining a time when they did not exist.

Those included in this nomination are: Randy Olsen for the original math models and basic concepts; George Lee for the pragmatic design and test implementation by scanning film to make digital imagery; Dave Hooper for the software to utilize Randy’s models; Lyman Ladner for creating the earliest demo products.

Additional background is found at http://online.wr.usgs.gov/ngpo/doq/doq_history.html

Team members:
Randle “Randy” Olsen retired from USGS as a physical scientist in 2005, after serving 39 years with the Survey. He graduated from the University of California, Berkeley in Civil Engineering and worked for USGS throughout his professional career. He returned to Berkeley for a Master’s degree in Photogrammetry while working for the USGS. It was Randy Olsen who introduced the underlying mathematics for the DOQ to the Western Mapping Center (WMC) just before leaving for a position at the USGS Headquarters in Reston, VA. At that time, Randy was the Chief of Photogrammetry at WMC.

George Lee studied photogrammetry under Professor Francis (Frank) Moffitt and Dr. James Anderson at the University of California at Berkeley and became active with ASP as a student before joining the USGS. During the time of the DOQ development, George Lee was Chief of Research and oversaw research, technology and application activities at WMC. Research and development of the DOQ was conducted within the Technology Office which was supervised by Lyman Ladner. He retired from USGS.

Lyman Ladner attended San Jose State University and received his degree in Mathematics while working for the USGS. He also took a leave of absence from the USGS to attend ITC in Holland to study Photogrammetry.

The development of the DOQ production software was done by the late David Hooper under the supervision of Lyman Ladner. Before getting into research, David Hooper worked for years as a stereo-compiler. David Hooper’s degree was in wildlife biology and he worked with U.S. Fish and Wildlife Service before coming to the USGS. He became enthusiastic about programming through an after-hour programming class sponsored at the USGS. His first involvement in
programming was for the Digital Elevation Model (DEM) program and then on to the development of the DOQ program.

The ASPRS Outstanding Technical Achievement Award was introduced for the first time in 2012. This Award consists of a silver presentation plaque mounted on a wood panel plus a check for $6,000.

Purpose: This grant is designed to reward the developer[s] of a specific breakthrough technology which causes quantum advances in the practice of photogrammetry, remote sensing or geographic information systems in the United States.

Donor: In 2011, the ASPRS Foundation received a very generous individual donation from Lifetime Achievement Awardee and ASPRS Fellow Clifford W. Greve to endow a new Outstanding Technical Achievement Award. This award is now fully endowed at the $6,000 level.

ASPRS Presidential Citations

2020 recipients: Lorraine Amenda, Lucia Lovison, Marguerite Madden, Rakesh Malhotra, Mary Mayes, and John McCombs

Lorraine Amenda
For reinvigorating and reorganizing the Region Officers Council.

Lucia Lovison
For her dedicated work as PE&RS Sector Insights Editor.

Marguerite Madden
For sharing her wisdom and experience with me during my time on the ASPRS board.

Rakesh Malhotra
For his efforts to recruit, organize and entertain student volunteers at the ASPRS conferences.

Mary Mayes
For her on-going support and patience with me during my time on the ASPRS board.

John McCombs
For his help in organizing and preparing the ASPRS 2019 Annual Conference in Denver and Pecora 2020 in Baltimore.

Mike Zoltek
For modernization of the Certification Program.

Purpose: First awarded in 1992, Presidential Citations are presented by the ASPRS President to members of ASPRS and other societies, family members, and friends in recognition of special, personal, and meritorious contributions to the operation or advancement of the Society and its interests during the presidential year.

Donor: ASPRS

The Presidential Citation is a hand-engrossed certificate.

ASPRS Fellow Award

2020 recipients: John S. Iiames, Jr., Riadh A. Munjy, Tim Warner and Qihao Weng

John S. Iiames, Jr.
As a research biologist with the United States Environmental Protection Agency (EPA) John Shepherd Iiames, Jr. has specialized in geospatial research with an emphasis on environmental remote sensing. Over his 20-year career, his research has focused on the geospatial analysis of the air-water-land interface at multiple scales (temporal and spatial) for the investigation of environmental indicators linked to environmental condition and human health. Iiames has assessed land cover and vegetative biomass using multiple remotely sensed data types including multi-spectral optical data, LIDAR, and radar. This expertise, in conjunction with research efforts investigating the accuracy and error embedded within remotely sensed and in situ-derived data, has provided the modeling community with inputs required to support key integrated, multidisciplinary exposure science research. Iiames is currently tasked as a co-lead principle investigator for the terrestrial remote sensing component embedded within a multi-agency NASA funded research project investigating cyanobacteria counts in freshwater aquatic systems. He is also currently working jointly with EPA researchers in quantifying ammonium flux in both temperate deciduous and coniferous forest ecosystems and investigating linkages between wildfire severity and drinking water quality.

Iiames has been recognized both within EPA and within the greater remote sensing scientific community for his scientific contributions. He has presented his research in both domestic and international venues, as invited keynote and/or session presenter. His research was awarded the ESRI Award for Best Scientific Paper in GIS, 3rd Place in 2003 at the 2004 ASPRS Annual Conference. In 2015, he received the ASPRS Outstanding Service Award for his sustained efforts in helping the Society develop its programs and achieve its goals and objectives. This award recognized his high level of leadership within the Society serving as Director of the Remote Sensing Applications Division (RSAD), organizing the national conference technical program in 2009 in Baltimore, Maryland, overseeing the annual conference program also held in Baltimore in 2013, and serving as the book review editor for Photogrammetric Engineering and Remote Sensing (PE&RS) for five years (2009–2014). In 2018 Iiames was awarded the John I. Davidson President’s Award for Practical Papers for a 2017 first authored article within PE&RS.

Since 2011, Iiames has served as the EPA representative as panel member for the NASA Earth Science Senior Review for Mission Extension. He was elected in 2016 to serve as a Science and Technical Advisory Member for the Albemarle-Pamlico National Estuary Partnership (APNEP) to identify, protect, and restore the significant resources of the Albemarle-Pamlico estuarine system. In 2019 he was selected for a national interagency program to provide expertise in smoke dispersion modeling for major wildfire events within the United States. He has also been recognized
for his work in EPA’s Science, Technology, Engineering, and Mathematics (STEM) outreach program. Since its inception he has been involved in teaching geospatial science to grades K-12, judging individual school science fairs as well as regional and state science fairs, and mentoring students on and off EPA’s campus.

Riadh Munjy

Riadh Munjy received his BSc in Civil Engineering from the University of Baghdad in 1976, a master’s degree in Civil Engineering, MSCE (1979), and a second master’s degree in Applied Mathematics, MS (1981), from the University of Washington, Seattle. Munjy received his PhD in Civil Engineering and photogrammetry from the University of Washington in 1982. Munjy is currently a full professor and the chairman of the Civil and Geomatics Engineering Department at California State University — Fresno, where he has served as professor since 1982. He has over forty years of experience in teaching courses in photogrammetry, digital mapping, GIS and least squares adjustment.

Beside teaching, his contributions to the science and art of photogrammetry include camera self-calibration, advancing and leading the transition from conventional aerial triangulation to airborne-controlled, both of which are implemented in the well-respected commercial aerial triangulation package, ISBBA. Munjy is also credited for the introduction of the finite element approach for sensor calibration in photogrammetry, the introduction of an analytical approach to color balancing and enhancement of digital imagery, the development of full processing work flow for the GeoSAR system and UAS photogrammetry guidelines and specifications for mapping.

Throughout his career, he has also served as a well-respected consultant to numerous national and international organizations, providing a diverse range of expertise in mapping and photogrammetry. As a professor, Munjy has supervised hundreds of students studying geomatics, published numerous peer-reviewed papers in a wide range of technical journals in photogrammetry and served as the Associate Editor for Theoretical and Applied Photogrammetry for Photogrammetric Engineering and Remote Sensing (PE&RS), (1991 – 1996). Munjy’s past achievements and awards include: the School of Engineering Faculty Award for Research Excellence (1996, 1998, 2002, 2003), the Caltrans Research Innovation Award (March 2004), the Halliburton Research Award (1992), the ASPRS Meritorious Service Award (1992 and 1997), and the ASPRS Fairchild Photogrammetric Award (2014).

Timothy A. Warner

Timothy A. Warner is Professor of Geology and Geography at West Virginia University (WVU), in Morgantown, West Virginia. Warner was born in Zimbabwe, and grew up in South Africa. He received his BS and BS (Honors) degrees from the University of Cape Town, South Africa. As an undergraduate, he held a summer job working for a remote sensing company, Spectral Africa, an experience that sparked a life-long fascination with remote sensing. Spectral Africa sponsored his Honors thesis on Landsat band ratios for mapping rocks and soils. A paper from that thesis was awarded the H. G. Fourcade Award by the South African Society for Photogrammetry, Remote Sensing and Cartography, and was published in that society’s journal — his first publication. In 1986 he moved to the US to pursue his dream of graduate study in remote sensing. After graduating as a PhD from the Department of Earth and Atmospheric Sciences at Purdue University, Warner was appointed an assistant professor of geology and geography at WVU. He is now a full professor. Working with students has been a key focus for Warner. He has advised three post-docs, five PhD students, four geology MS students, and 25 Geography MA students. He has served on 67 graduate research committees. He was the mentor for an undergraduate student who won a US Congressional Goldwater Scholarship, and another student who won both the US Geospatial Intelligence Foundation Scholarship and the Boren Scholarship. Warner has also put considerable effort into teaching remote sensing to professional groups. He has published a number of peer-reviewed papers on information literacy in remote sensing education, and in 1999 he won the WVU Eberly College of Arts and Sciences Outstanding Teaching Award. Warner’s research contributions include many aspects of remote sensing, including lidar, hyperspectral imaging, and multispectral thermal remote sensing, as well as ecological and geological applications. He has a particular interest in the exploitation of spatial information in image classification. His work has been funded by the National Science Foundation, NASA, US Department of Energy, USGS, US Forest Service, the Natural Resources Conservation Service, the National Imagery and Mapping Agency (NIMA), and other private and state agencies. He has published 77 peer-reviewed papers, and two books. The 2009 SAGE Handbook of Remote Sensing, co-edited with M. Duane Nellis and Giles M. Foody, presents a comprehensive overview of our field. Remote Sensing with IDRISI, co-authored with David Campagna, presents a tutorial on remote sensing image analysis. With funding from the European Union and the US Department of Education, he helped develop an international remote sensing education consortium that included the US, France, Norway, and Greece. The consortium sponsored annual student exchanges between 1999 and 2006. He has received two Fulbright Awards to support sabbaticals in France and Chile. He has completed international research at the invitation of collaborators in Armenia, Republic of Korea, and France. As part of his focus on promoting remote sensing in the state of West Virginia, he developed a state-wide consortium, West Virginia View, under the auspices of the USGS-sponsored AmericaView program. Formed in 2002, West Virginia View now comprises six educational institutions, two state agencies, a federal agency, and two NGOs. West Virginia View’s accomplishments include a greatly expanded availability of remote sensing courses in West Virginia colleges, statewide sharing of remote sensing software licenses, and direct support of the remote sensing educational experiences of numerous students. Warner has provided professional
service at many levels. At WVU, he served as associate chair of the Department of Geology and Geography, 2008-2011, and served also on the university’s strategic planning council, amongst many other service roles. In national service, he was elected founding secretary of AmericaView, and was recognized with that group’s Legacy Award in 2004. He served as chair of the Association of American Geographers (AAG) Remote Sensing Specialty Group (RSSG) and received the RSSG Outstanding Contributions Award in 2006. Warner has served in an editorial capacity on four journals: as a member of the editorial board of Geography Compass, as progress reports editor for Progress in Physical Geography, as an editor for Remote Sensing Letters, and since 2014, he has served as the Editor in Chief of the International Journal of Remote Sensing (IJRS). Warner has always highly valued his three decades of membership in ASPRS-- the society has recognized his contributions with five awards. As a graduate student at Purdue, he received the Cambridge Instruments Photogrammetry and Remote Sensing Award, and the following year, the William A. Fischer Memorial Scholarship. The latter was particularly helpful for his career, because it funded his dissertation field research in Canada. In 1992 he received the ASPRS Merit Award. Two of his PE&RS papers have won awards from ASPRS, including the Boeing Award for Best Paper in Image Analysis and Interpretation (2006) and the Talbert Abrams Award (2015).

From 1990-1992 he served as chair of the ASPRS Student Affairs Committee, and ran a very successful job fair and student program at the society’s spring and fall conferences during those years. He subsequently served as the ASPRS Scholarship Chair (1992-1997). He has served as a reviewer for many manuscripts for Photogrammetric Engineering & Remote Sensing (PE&RS), and has published 12 papers in the journal, in many cases with his students as first authors. With the help of the ASPRS Potomac Region, he established the Alfred O. Quinn Remote Sensing Student Forum at WVU, to focus WVU student interest in remote sensing and ASPRS. In summary, Warner has demonstrated an exceptional record of contributions to the mapping sciences, and specifically to the remote sensing community. His capabilities as an educator have enhanced the understanding of the mapping sciences for hundreds of university students as well as established professionals who have benefited from his varied outreach activities. Warner is an accomplished scientist and has demonstrated career-long service competence for many organizations including AmericaView, AAG, and especially ASPRS.

Qihao Weng

Qihao Weng is the Director of the Center for Urban and Environmental Change and a tenured Full Professor at the Department of Earth & Environmental Systems, Indiana State University (ISU), and an Editor-in-Chief of ISPRS Journal of Photogrammetry and Remote Sensing. He was a visiting NASA Senior Fellow at Marshall Space Flight Center (2008-09). Born in Fuzhou, China, he received an A.S. from Minjiang University in 1984, a M.S. from South China Normal University in 1990, a M.A. from the University of Arizona in 1996, and a Ph.D. from the University of Georgia in 1999. At the same year, he joined the University of Alabama as an Assistant Professor. Since 2001, he has been a member of the faculty at Indiana State, and was early promoted to Associate Professor in 2005 and to Full Professor in 2009.

At Indiana State, Weng teaches courses on remote sensing, digital image processing, remote sensing-GIS integration and environmental modeling, and has since mentored 15 doctoral and 13 master students. Some of his former students are rising rapidly in the field of remote sensing. He transformed an introductory remote sensing course from a low enrollment undergraduate course to an exceedingly popular general education class. From 2002 to 2008, he served as the director of graduate studies in his department. His efforts to reform curriculum, admission and retention procedures, and advising policies received much appreciation from his colleagues, contributing to attracting quality students and recent success in ISU geography graduate program. In addition, Weng has sincerely dedicated his efforts in developing course materials and modules for introducing contemporary remote sensing and GIS techniques to teachers and students at primary and secondary schools at Indiana via short-courses, workshops, and seminars. He was a Co-PI for a USAID-funded project that provided course instruction and curriculum materials to a group of professors from Malawi in 2004-05. The textbooks written by Weng, “An Introduction to Contemporary Remote Sensing” (McGraw Hill, 2012) and “Remote Sensing and GIS Integration” (McGraw Hill, 2009), have been used worldwide in research universities, undergraduate institutions, and community colleges.

Weng conducts researches on urban remote sensing, urbanization and associated environmental effects. His publications focus on the following areas: urban heat island modeling using remote sensing data and field measurements; estimation and mapping of urban impervious surfaces; urban sprawl mapping and environmental impact analysis; urban land characterization and classification; population estimation, urban environmental quality and quality of life analysis; human and environmental health; human ecosystems sustainability analysis; and human-environment interactions. Weng has published 200 articles and 10 books, with Google citations of over 12,000 and H-index of 50. He has worked extensively with optical and thermal remote sensing data, more recently with LiDAR data, with financial support from NSF, NASA, USGS, USAID, NOAA, National Geographic Society, and Indiana Dept of Natural Resources. He has been invited to give approximately 90 talks by the organizations and conferences held in the U.S., China, Canada, Brazil, Greece, and Hong Kong, and has presented over 100 papers at professional conferences (including co-presenting).

Weng is the Founding Director of the university’s Center for Urban and Environmental Change since 2004, a center dedicated to interdisciplinary research involving the studies of the urban and suburban environments and applications of geospatial technologies. He sets up the center’s structure and functions, secures funding for initial years, and establishes a sustainable funding mechanism. Several programs have since generated
significant results, including proposal submission, speaker series, graduate brown-bag series, faculty incentive fund, and student research support. The center has served as a forum for dialogue between ISU researchers and decision-makers in governmental agencies at different levels and with the public, and has facilitated the collaboration of its faculty with local communities. As an ASPRS member since 1996, Weng served as a National Director from 2007 to 2010, Indiana Director 2003-04, Faculty Advisor of the Indiana State University Chapter of ASPRS since 2007, and a member of Data Preservation & Archiving Committee (2003-04), Standards Committee (2008), Digital Globe Foundation Award Committee (2013, 2015), ESRI Award committee (2013), Erdas Award committee (2014), and Boeing Award committee (2014). He has sponsored more than a dozen students to become ASPRS members. During his tenure as the National Director, he actively recruited members from Indiana for ASPRS and became a membership champion in 2005 and 2006, co-chaired the Joint Summer Conference of Eastern and Western Great Lakes Regions (2008), and worked with ISU Office of Continuing Education to provide continued education credit to professionals in the Western Great Lakes Region, and facilitated the 2011 ASPRS annual conference held in Milwaukee. He has regularly attended ASPRS conferences as a presenter, session organizer and moderator. He is frequently called upon to review manuscripts for PE&RS and other journals on remote sensing, GIS, with applications in environment, planning, geosciences, geography, and ecology. In addition, he served as the Secretary of the ISPRS Working Group VIII/1 (2004-08), and is the organizer and program chair of biennial International Workshop on Earth Observation and Remote Sensing Applications, a committee member of 22 international conferences, and an editorial board member of 10 journals. Due largely to his vision and dedication, the ISPRS Journal now ranks #1 in the fields of remote sensing and imaging science with impact factor of 6.387. Other significant activities include serving as the Lead of GEO’s Global Urban Observation and Information Task (2017–19), the Series Editor for Taylor & Francis Series in Remote Sensing Applications, a member of U.S. DOE’s Cool Roofs Roadmap and Strategy review panel in 2010, and Chair for American Association of Geographers (AAG) China Geography Specialty Group (2010–2011). Weng was the recipient of the 2015 Willard and Ruby S. Miller Award by AAG for his outstanding and pioneering contributions in urban remote sensing, the 2011 Outstanding Contributions Award in Remote Sensing sponsored by AAG Remote Sensing Specialty Group, the 2010 Erdas Award from ASPRS (1st place, co-authored with H. Liu), the Robert E. Altenhofen Memorial Scholarship (1999), and the Best Student-Authored Paper Award by the International Geographic Information Foundation (1998). At ISU, he received the Theodore Dreiser Distinguished Research Award in 2006 (the university’s highest honor) and Lilly Foundation Faculty Fellow in 2005 (commending faculty’s excellence in experiential learning and community engagement). In May 2008, he received a prestigious NASA senior fellowship, allowing him to work at Marshall Space Flight Center and to conduct research on remote sensing applications in urban climate and public health. Purpose: Started in 1992, the designation of Fellow is conferred on Society members who have been active for a total of at least ten years and who have performed exceptional service in advancing the science and use of the mapping sciences and related disciplines. It is awarded for professional excellence and for service to the Society.

Donor: ASPRS

The ASPRS Fellow Award includes a lapel pin and a hand-engrossed certificate.

ASPRS Outstanding Service Award

2020 recipients:

Roberta Lenczowski
For Outstanding Service as ASPRS Board Secretary (2014 – 2020).

David Maune

Michael S. Renslow
For development of the Certification Program.

Stanley Morain, Amy Budge & Michael S. Renslow

Purpose: Established in 1991, The Outstanding Service Award is given in recognition of outstanding and unusual efforts in helping ASPRS develop and carry out its program over a sustained period. Recipients have performed outstanding service at the chapter, regional, or national level. Awardees’ service includes any activities, including professional, that have helped the Society achieve its goals and objectives.

Donor: ASPRS

The Outstanding Service Award consists of a bronze plaque.
Recognition of Retiring Members of the Board of Directors

Thomas R. Jordan
Anne Hillyer, Immediate Past President
Peng Fu, Early Career Professionals Council
Victoria Scholl, Student Advisory Council
John McCombs, Technical Division Directors Council

Recognition of Retiring Division Directors

Thomas R. Jordan
Amar Nayegandhi, Lidar Division
Paul C. Bresnahan, Photogrammetric Applications Divisions
David W. Kreighbaum, Remote Sensing Applications Division
Benjamin Vander Jagt, Unmanned Autonomous Systems Division

Installation of New Division Assistant Directors

Thomas R. Jordan
Ajit Sampath, Lidar Division
Ben Wilkinson, Photogrammetric Applications Divisions
Amr Abd-Elrahman, Remote Sensing Applications Division
Dan Hubert, Unmanned Autonomous Systems Division
Bill Swope, Professional Practice Division

Installation of New Division Directors

Thomas R. Jordan
Joshua Nimetz, Lidar Division
Kurt Rogers, Photogrammetric Applications Divisions
Raechel A. Portelli, Remote Sensing Applications Division
Megan Ritelli, Unmanned Autonomous Systems Division
Harold Rempel, Professional Practice Division

Installation of New Council Chairs

Thomas R. Jordan
Bobby Arlen, Early Career Professionals Council
Youssef Kaddoura, Student Advisory Council
Bandana Kar, Technical Division Directors Council

Installation of Officers

Thomas R. Jordan
Christopher Parrish, Vice-President
Jason Stoker, President-Elect
Jeff Lovin, President

Presentation of Birdseye Citation and President's Key to Retiring President

Jeff Lovin

Thomas R. Jordan, Immediate Past-President
To access retiring President Tommy Jordan’s address followed by President Lovin’s address, go to: https://www.youtube.com/watch?v=fq6F5Exl6dE&feature=youtu.be

Purpose: The Col. Claude H. Birdseye President’s Citation was established in 1965 as a tribute to one of the founders and the first president of the Society. Each year at the Annual Convention it is conferred on the outgoing president in recognition of her/his contributions to the Society.

Donor: ASPRS

The Birdseye Citation carries with it a gold Past President’s Key, and a hand-engrossed certificate. The retiring President will also receive the Presidential Gavel mounted on a walnut plaque.

President’s Address

Jeff Lovin

Scholarships and Outstanding Paper Awards

Lindi Quackenbush

Robert E. Altenhofen Memorial Scholarship

2020 recipient: Abishek Poudel

The 2020 Robert E. Altenhofen Memorial Scholarship recipient is Abishek Poudel, a doctoral candidate at the State University of New York, College of Environmental Science and Forestry. His field of specialty is ecological modeling and geospatial applications for forest and natural resources management. In addition to his studies, he has served as a research aid and teaching assistant in his department. His current research involves the accuracy of aerial imagery from unmanned aerial systems for environmental applications and monitoring. His faculty advisor is Prof. Eddie Bevilacqua.

Purpose: First given in 1986, the Robert E. Altenhofen Memorial Scholarship is intended to encourage and commend college students who display exceptional interest and ability in the theoretical aspects of photogrammetry.

Donor: The ASPRS Foundation. This award was originally established by Mrs. Helen Altenhofen as a memorial to her husband, Robert E. Altenhofen, past president of ASPRS. He was an outstanding practitioner of photogrammetry and made notable contributions to the mathematical aspects of the science.

The Altenhofen Scholarship consists of a check for $2,000 and a hand-engrossed certificate.
Abraham Anson Memorial Scholarship

2020 recipient: Alberto Loera

Alberto Loera is a junior at California State University at Fresno, enrolled in a major of Geomatics Engineering specializing in Land Surveying. He intends to graduate in the spring of 2021. He was the valedictorian of his high school and has been on either the Dean’s or President’s List in each of his semesters at Fresno and has a GPA of 3.68. Loera has been active in multiple volunteer activities both professionally and in his community. He is involved in a number of relevant clubs at his university and has obtained professional experience as a survey technician for several years. His accomplishments and interests are an excellent match for the Abraham Anson Scholarship.

Purpose: To encourage students who have an exceptional interest in pursuing scientific research or education in geospatial science or technology related to photogrammetry, remote sensing, surveying and mapping to enter a professional field where they can use the knowledge of their discipline to excel in their profession.

Donor: This award is presented by the ASPRS Foundation from funds donated by the Anson bequest and contributions from the Society and the Potomac Region as a tribute to Abe Anson’s many contributions to the field of photogrammetry, remote sensing, and long, dedicated service to the Society.

The award consists of a certificate, a check in the amount of $2,000 and a one-year student membership (new or renewal) in the Society.

John O. Behrens Institute for Land Information (ILI) Memorial Scholarship

2020 recipient: Elizabeth Hanwell

The 2020 John O. Behrens Institute for Land Information (ILI) Memorial Scholarship is awarded to Elizabeth Hanwell. Hanwell is a senior at West Virginia University pursuing a bachelor’s degree in environmental geoscience. She has demonstrated academic excellence in geospatial engineering technology and related math and science courses. Hanwell has pursued four professional work internships that focused on generating, curating, and analyzing geospatial data and plans to explore graduate programs focused on Earth observation applied to hazard mapping and disaster response.

The John O. Behrens ILI Memorial Scholarship was established by the Institute for Land Information (since officially dissolved) as a tribute to the many contributions of Mr. Behrens to the field of geographic and land related information and technology. John O. Behrens was a founder of the ILI and the author of many articles about the value of spatial information, land assessment and taxation, and land information policy. In recognition of Mr. Behrens outstanding contributions over his distinguished career, funds from the ILI have been donated to the ASPRS Foundation to be administered for the John O. Behrens ILI Memorial Scholarship.

Purpose: To encourage students/persons who have an exceptional interest in pursuing scientific research or education in geospatial science or technology or land information systems/records to enter a professional field where they can use the knowledge of this discipline to excel in their profession.

Donor: The ASPRS Foundation from funds donated by the ILI.

The Award consists of a certificate and a check in the amount of $2,000.

Robert N. Colwell Memorial Fellowship

2020 Recipient: Colin Doyle

Colin Doyle completed a B.S. degree in Environmental Biology from Georgetown University (2013) and a MA degree in Geography and the Environment from The University of Texas at Austin (2017). He is pursuing a PhD degree at UT-Austin, focusing on understanding the hydrology of a large ancient floodplain canal and a raised field agricultural system in Belize by using field, laboratory, and remote sensing methods. This agricultural complex, which is potentially the largest known extent of ancient Maya agricultural development, was discovered by Doyle’s UT research group using multispectral LiDAR and other data. Doyle is applying novel applications of machine learning with multispectral LiDAR intensity data to distinguish features that the LiDAR-derived DEMs could not. His work will show how ancient Maya agriculture and water management practices were adapted to past climate change, and have impacted the modern landscape across the Maya lowlands of Belize, Guatemala, and Mexico. Before entering graduate school, Doyle worked on remote sensing projects involving multiple NGOs and government organizations at the NASA-Goddard DEVELOP National Program. He was the DEVELOP Center Lead for a project using Earth observations to aid flood monitoring in Southeast Asia along the Mekong River. Moving to the Goddard Hydrological Sciences Branch, he built a near real-time flood mapping platform for the Mekong River Commission. While pursuing his PhD, Colin works as Director of Technology for Cloud to Street, a company he helped start that uses remote sensing-based tools to identify people at risk to flooding, improve watershed management, and develop near real-time flood assessment. Supported by the World Food Programme, the World Bank, and Africa Risk Capacity, these tools have been applied in 11 African and South Asian countries. Doyle’s career goals are to both advance scientific frontiers and translate the newest science into practical tools to bridge the gap between geospatial scientists and the disaster managers in middle- and low-income countries.

Over the course of more than a half century, Dr. Robert N. Colwell developed a reputation as one of the world’s most respected leaders in remote sensing, a field that he stewarded from the interpretation of aerial photographs during World War II, to the advanced acquisition and analysis of many types of geospatial data from military and civilian satellite platforms. His career included nearly 40 years of teaching and research at the University of California, Berkeley, a distinguished record of military service reaching the rank of Rear Admiral, and prominent roles in private industry and as a consultant for many U.S. and international agencies. Among the many awards bestowed upon him, Dr. Colwell had the distinction of being one of the 25 Honorary Members of ASPRS.
Purpose: Established in 2006 to encourage and commend college/university graduate students or post-doctoral researchers who display exceptional interest, desire, ability, and aptitude in the field of remote sensing or other related geospatial information technologies, and who have a special interest in developing practical uses of these technologies.

Donor: The ASPRS Foundation, from funds donated by students, associates, colleagues and friends of Robert N. Colwell.

The Award consists of a grant of $7,000 and a one-year student or associate membership (new or renewal) in ASPRS.

William A. Fischer Memorial Scholarship

2020 recipient: Bo Peng

Bo Peng, currently a graduate student in the Department of Geography at the University of Wisconsin, Madison has been selected to receive the 2020 William A. Fischer Memorial Scholarship. Peng is being presented this award in recognition of his impressive research accomplishments and publications, superior analytical skills, and outstanding academic record. Peng has clearly demonstrated the ability to combine his significant research experience and geospatial data science skills to help us address real world problems and inform decision making.

Peng’s research is focused on remote sensing and image understanding for near real-time flood extent mapping and depth estimation. Peng will be developing advanced deep-learning and computer vision techniques utilizing an unsupervised learning method based on generative adversarial networks (GAN), which can learn the underlying hidden object structure in an unsupervised manner. While GAN has been used for image classification, anomaly detection, and object detection, it has not been applied to change detection of flooded areas using remotely sensed multispectral or SAR imagery. Peng will also be developing a novel flood depth estimation framework with very high resolution aerial remote sensing data. The committee hopes that the results of his work will be shared with water and natural resource managers who will face ever increasing climate variability and the growing threat of flooding.

Purpose: The William A. Fischer Scholarship facilitates graduate studies and career goals of a worthy student adjudged to address new and innovative uses of remote sensing data and techniques that relate to the natural, cultural, or agricultural resources of the Earth. It was established in 1984.

Donor: the ASPRS Foundation through individual and corporate contributions in memory of William A. Fischer.

The William A. Fischer Memorial Scholarship consists of a $2,000 check and a hand-engrossed certificate.

Francis H. Moffitt Memorial Scholarship

2020 recipient: Wenhao Liu

The 2020 Francis H. Moffitt Memorial Scholarship is awarded to Wenhao Liu. Liu is currently a student at the University of Florida pursuing a Master of Science degree in Geomatics specializing in Bathymetric Photogrammetry and Remote Sensing. Liu received a Bachelor of Engineering degree from Shandong Agricultural University in China. His research plan is to combine computer vision and deep learning methods in oblique photogrammetry to improve image matching accuracy and apply it to coastal and underwater studies. Following graduation, he plans to pursue a Ph.D. degree and then to work as a research scientist or professor at a university.

Purpose: The award was first presented in 2008 with the purpose of encouraging upper-division, undergraduate-level and graduate-level college students to pursue a course of study in surveying and photogrammetry leading to a career in the geospatial mapping profession.

Donor: The ASPRS Foundation from funds donated to the Foundation from former students, associates, colleagues and friends of Francis Moffitt.

The award consists of a certificate and a check in the amount of $7,000 and a renewal membership in ASPRS.

The Kenneth J. Osborn Memorial Scholarship

2020 recipient: Trenton Holyfield

The 2020 Kenneth J. Osborn Memorial Scholarship is awarded to Trenton Holyfield. Holyfield is pursuing a Bachelor of Science degree in Surveying Engineering from Ferris State University and plans to graduate in May of 2021. Following his BS, he plans to pursue his professional land surveyor license in Michigan, and to continue to promote the geospatial information technology profession in the Region. Trenton exemplified the Osborn qualities of communication and collaboration through participation in activities within the Ferris State University campus community by serving in leadership positions in student organizations such as Lambda Sigma, the land surveying honor society, and of Burt and Mullet, the student chapter of the National Society of Professional Surveyors. He is also an active student member of ASPRS, American Association of Geodetic Surveyors (AAGS), The Hydrographic Society of America (THSOA), and the United States Geospatial Intelligence Foundation (USGIF). In addition to his campus leadership activities, Holyfield also serves as a high school wrestling coach. Holyfield’s faculty advisor is Professor Khadendra Thapa, PhD.

Purpose: The Kenneth J. Osborn Scholarship is established to encourage and commend college students who display exceptional interest, desire, ability, and aptitude to enter the profession of surveying, mapping, photogrammetry, or geospatial information and technology. In addition, the Award recognizes students who excel at an aspect of the profession that Ken demonstrated so very well, that of communications and collaboration.
Donor: The ASPRS Foundation from funds donated by the friends and colleagues of Kenneth J. Osborn. Recognized nationally and internationally, Ken was an outstanding practitioner of surveying, mapping, photogrammetry, and geospatial information and technology, and a great friend of the Society. As a professional cartographer with the U.S. Geological Survey, Ken made significant contributions to these fields. The award was first offered in 2005.

The Award consists of a check in the amount of $2,000, an engrossed certificate and a membership renewal in the Society.

Ta Liang Memorial Award
2020 recipient: Mohammad Abdul Qadir Khan
The Ta Liang Memorial Award for 2020 is presented to Mohammad Abdul Qadir Khan. The selection was based on his academic achievements and awards, participation in a diversity of geospatial research projects, technical publications, planned program of research-related travel, and volunteer activities for youth and continuing education programs. Mr. Khan is pursuing a Master of Science degree in Geospatial Data Science at the University of Delaware. He received his Bachelor of Technology degree in Physical Sciences at the Indian Institute of Space Science and Technology (IIST). His research focus is to advance the technology of Machine Learning coupled with satellite imagery and geospatial tools for addressing the global food security crisis and to provide current information of cropping practices and patterns at farm scale. He is conducting his research in northeastern India, and will be travelling there during Spring/Fall 2020 to conduct field work to obtain information for crops grown in his study area. The field data will be used for image classification and accuracy assessment purposes. His research will advance our understanding of shifting cultivation patterns and cycles in the region based on biophysical factors and population dynamics in the region. Purpose: To facilitate research-related travel by outstanding graduate students in remote sensing, including field investigations, agency visits, participation in conferences, or other travel which enhances or facilitates graduate research.

Donor: Individual and corporate contributions to the ASPRS Foundation in memory of Ta Liang, a skilled civil engineer, an excellent teacher, and one of the world’s foremost airphoto interpreters, the award consists of a $2,000 grant and a hand-engrossed certificate.

Paul R. Wolf Memorial Scholarship
2020 recipient: Lee Ann Nolan
The 202 Paul R. Wolf Memorial Scholarship is awarded to Lee Ann Nolan. Nolan is receiving this award in recognition of her outstanding academic credentials and her plans and enthusiasm to become an education professional in Surveying, Mapping, Photogrammetry and related fields. Nolan is currently a Doctoral candidate (planned graduation August 2020) in Geography at the University of West Virginia–Morgantown. Nolan has demonstrated a continued interest, dedication, enthusiasm, passion, and aptitude to become an education professional and has been recognized at all levels. Nolan’s career goal is to become a tenured teaching/research faculty member at a university, wishing to grow her skill set and continually learn with special interest in the area of UAV’s and drones.

Purpose: To encourage and commend college students who display exceptional interest, desire, ability, and aptitude to enter the profession of teaching surveying, mapping, or photogrammetry.

Donor: the ASPRS Foundation from funds donated by the friends and colleagues of Paul R. Wolf. Recognized nationally and internationally, Paul was an outstanding educator and practitioner of surveying, mapping, and photogrammetry and a great friend of the Society. As author, teacher, and mentor, Paul made significant educational and academic contributions to these fields. The award was inaugurated in 2003 and includes a grant of $4,000 and a hand-engrossed certificate.

Outstanding Paper Awards

John I. Davidson President’s Award for Practical Papers


3rd Place: Zhixin Qi, Anthony Gar-On Yeh, and Xia Li for “Scattering-Mechanism-Based Investigation of Optimal Combinations of Polarimetric SAR Frequency Bands for Land Cover Classification,” PE&RS, 85 (11).

Purpose: The John I. Davidson President’s Award for Practical Papers was established in 1979 to encourage and commend individuals who publish papers of practical or applied value in PE&RS 85 (6).

Donor: The ASPRS Foundation in memory of ASPRS Past President John I. Davidson.

The First Place award includes an engraved pewter tankard, a cash award of $1,000 and a hand-engrossed certificate; Second Place is a cash award of $600 and a hand-engrossed certificate; Third Place is a cash award of $400 and a hand-engrossed certificate.
The Esri Award for Best Scientific Paper in GIS

1st Place: X. Wang, F. Rottensteiner, and C. Heipke for “Robust Structure From Motion Based on Relative Rotations and Tie Points,” PE&RS 85 (5).


3rd Place: Harith Aljumaily, Debra F. Laefer, and Dolores Cuadra for “Integration of Lidar Data and GIS Data for Point Cloud Semantic Enrichment at the Point Level,” PE&RS, 85 (1).

Purpose: Established in 1991, the fully-endowed ESRI Award honors individuals who publish papers of scientific merit that advance our knowledge about GIS technology.

Donor: Esri, Inc. through the ASPRS Foundation

The Esri Award first prize is $1,000 and a hand-engrossed certificate; second prize is $600 and a hand-engrossed certificate; third prize is $400 and a hand-engrossed certificate.

Talbert Abrams Award

2020 recipients:

Grand Award: Chang Li, Xiaojuan Liu, and Wei Lu for “An Image-Pyramid-Based Raster-to-Vector Conversion (IPBRTVC) Framework for Consecutive-Scale Cartography and Synchronized Generalization of Classic Objects,” PE&RS, 85 (3).


Purpose: The Talbert Abrams Award was established in 1945 to encourage the authorship and recording of current, historical, engineering, and scientific developments in photogrammetry. The Award is determined from papers published in PE&RS.

Donor: The ASPRS Foundation

The award consists of a check for $3,000 and an engraved plaque for the Grand Award, and an award certificate for the First and Second Honorable Mentions.

Region Awards

2020 recipients:
Region of the Year
Florida Region
Potomac Region
Pacific Southwest Region

Website & Newsletter of the Year
Pacific Southwest Region
Western Great Lakes Region
Rocky Mountain Region

Roger Hoffer Membership Award

2020 Honorable Mention: Dr. Xiaojun Yang, Florida State University

Purpose: First awarded in 1968 as the ASPRS Ford Bartlett Membership Award (which was originally sponsored by the firm of Lockwood, Kessler, and Bartlett, Inc.) to honor members for actively promoting membership in ASPRS. This award now marks the the exceptional efforts of ASPRS Past President Roger Hoffer in managing the Membership Committee and recruiting hundreds of student members.

Donor: ASPRS

A member is eligible to receive the Award after sponsoring ten or more members in one year. Each recipient receives a hand-engrossed certificate and a one-year membership in the Society. An Honorable Mention is awarded to those who sponsor at least five new members.

Introduction of the Rising Stars

The ASPRS Rising Star program is focused on mentorship of tomorrow’s leaders within ASPRS and the geospatial and remote sensing community. Rising Stars are defined as early career professionals within the first ten years of their geospatial careers who are selected for sponsorship within the program.

The current Rising Stars are:
Amanda Aragon
Charles Krugger