1st Announcement and Call for Papers



Part of the ISPRS Geospatial Week 2019

Enschede, The Netherlands

http://www.uav-g.com





Unmanned Aerial Vehicles (UAV) have become a popular instrument for a wide range of emerging applications such as mapping, search & rescue, infrastructure monitoring, precision farming, transportation, just to mention some of them. The UAV market has overcome 130 B\$ value in the last year (source PWC report 2017) and the trend looks extremely promising for the upcoming years too. The economic boom has boosted the scientific and technological development of UAV technologies in the last decade. In this context, **UAV-g** was initiated in 2011 as the largest scientific event dedicated to UAV in Geomatics and Remote Sensing. In the different editions, the new scientific challenges have made more evident the need for an inter-disciplinary approach leading to stronger synergies with adjacent disciplines.

The ambition of **UAV-g 2019** is to bring together experts from different domains such as photogrammetry, remote sensing, robotics, computer vision, aerospace engineering as well as UAV user communities. UAV-g is the common house of all these experts where they can create synergies, learn about the recent developments and exchange views on the future directions of UAV research, applications and services. Researchers, developers, service and platform providers as well as end users are therefore invited to participate in UAV-g and contribute with presentations, posters, discussions and demonstrations to create synergies between researches and applications on unmanned platforms.

For the first time in its history, UAV-g will be hosted by the <u>ISPRS GeoSpatial Week</u> (GSW) 2019. This will ensure a larger audience and impact of the conference on the Remote Sensing disciplines. The scenario of the <u>University of Twente</u> (Enschede, The Netherlands) campus and its facilities (i.e. flight area) will make possible to assist at demonstrations and exhibitions on the recent developments of the unmanned platforms technologies.







1st Announcement and Call for Papers

Themes of Event:

A (not exhaustive) list of terms of reference of UAV-g 2019 is provided below:

- On board sensors and data fusion.
- Image orientation and accurate georeferencing
- Simultaneous localization and mapping (SLAM) and visual odometry
- Dense image matching and 3D model reconstruction
- 3D reconstruction from images and laser sensors
- Semantic scene understanding from UAV images and videos
- Integration of UAV data with other data sources (LiDAR, airborne, satellite, SAR, etc.)
- 2D and 3D mapping with UAV data
- UAV for search & rescue
- Natural hazards monitoring
- Precision farming with UAVs
- Environmental monitoring and mapping with UAVs
- Change detection in urban and natural environments
- Infrastructure Monitoring
- New Platforms, payloads and instruments for photogrammetry and remote sensing
- Cooperative UAVs and swarm UAVs
- UAV flight control
- Obstacle sense and avoidance,
- Autonomous navigation
- On-line and real-time UAV data processing
- Technological challenges and new applications
- UAV Regulations

Submission of papers:

Authors are invited to submit abstracts or full papers for a double-blind peer review process. The papers should be prepared according to the <u>ISPRS guidelines</u> for preparing manuscripts and should not exceed 8 pages in length. Accepted papers will appear as a Volume of the <u>ISPRS Archives</u> (abstract submission) or a Volume of the <u>ISPRS Annals</u> (full paper submission). The Archives are listed in the ISI Conference Proceedings Citation Index (CPCI) of the Web of Science, SCOPUS, the E/I Compendex, and the Directory of Open Access Journals (DOAJ), while the Annals are listed in the ISI Conference Proceedings Citation Index (CPCI) of the Web of Science, SCOPUS, and in the Directory of Open Access Journals (DOAJ).

Preference for oral presentations will be given to Annals papers.

Important dates:

17 January, 2019 Full paper submission (Annals)

4 February, **2019** Extended abstract submission (Archives)

1 March, 2019 Abstract author notification8 March, 2019 Full paper Author notification

2 April, 2019 Camera ready paper submission

10-12 June, 2019 UAV-g 2019

10-14 June, 2019 ISPRS GeoSpatial Week







1st Announcement and Call for Papers

Local organizing chair:

Francesco Nex – University of Twente, The Netherlands

Scientific committee:

Costas Armenakis - York University, Canada

Mourad Bouziani - IAV Hassan II, Morocco

Filiberto Chiabrando - Politecnico di Torino, Italy

Davide Cucci - EPFL, Switzerland

Wolfgang Förstner – University of Bonn, Germany

Matteo Fumagalli – Aalborg University, Denmark

Kevin Franke - Brigham Young University, USA

Andrea Fusiello - University of Udine, Italy

Markus Gerke - Technical University of Braunschweig, Germany

Jean Marc Gilliot - AgroParisTech, France

Daniele Giordan – CNR IRPI, Italy

Görres Grenzdörffer - University of Rostock, Germany

Norman Kerle – University of Twente, The Netherlands

Taejung Kim - Inha University, Korea

Lammert Kooistra - Wageningen University and Research, The Netherlands

Norbert Haala - University of Stuttgart, Germany

Petra Helmolz - Curtin University, Australia

Eija Honkavaara - National Land Survey of Finland, Finland

Dorota Iwaszczuk - Technical University of Munich, Germany

Arko Lucieer - University of Tasmania, Australia

Matthew McCabe - King Abdullah University of Science and Technology, Saudia Arabia

Farid Melgani – University of Trento, Italy

Claudio Persello - University of Twente, The Netherlands

Fabio Remondino - Fondazione Bruno Kessler, Italy

Ewelina Rupnik – IGN, France

Václav Šafář – Research Institute of Geodesy, Topography and Cartography, Czech Republic

Cyrill Stachniss – *University of Bonn, Germany*

Rudolph Triebel – DLR, Germany

Matthew Westoby - Northumbria University, UK

Sponsors:







...and others will come soon





