

ISPRS Technical Commission II Symposium

June 11-14, 2024, Las Vegas, Nevada Flamingo Las Vegas Hotel, <u>https://www.caesars.com/flamingo-las-vegas</u>

<u>ISPRS Technical Commission II "Photogrammetry"</u> focuses, at various scales, on geometric, radiometric, and multi-temporal aspects of the image- and range-based 3D surveying, mapping, and modeling in the age of Artificial Intelligence and Mixed Reality. We welcome researchers, practitioners, and companies in photogrammetry and computer vision to present and discuss their results with a broader audience. The Symposium will feature four days of plenary, keynote talks, and parallel sessions of oral and poster presentations from academia and industry.

The event is organized in collaboration with ASPRS (American Society of Photogrammetry and Remote Sensing) and SGPF (Swiss Society of Photogrammetry and Remote Sensing).

Submission website: Forth-coming

Full Paper Submission Deadline:	January 22, 2024
Extended Abstract Submission Deadline:	February 5, 2024
Reviews Released:	March 18, 2024
Camera Ready Submission Deadline:	April 15, 2024
Tutorials	June 10, 2024
Symposium	June 11-14, 2024

Note: Each accepted paper needs at least one full-registration and in-person attendance to be published. ISPRS reserves the right to exclude an accepted paper from distribution if it is not presented at the conference.

Themes

WG 1: Image Orientation and Fusion

- Multimodal image matching for alignment, registration, and fusion of multi-source imagery
- Camera calibration, relocalization, and large-scale SfM
- Traditional and learning-based approaches to multi-view stereo

WG 2: Point cloud acquisition and processing

- Multi-modal point cloud fusion for 3D semantic mapping
- Point cloud quality control and improvement
- Multi-view stereo and Deep Learning for 3D reconstruction and scene understanding

WG 3: 3D scene reconstruction for modeling & mapping

- Object detection and 3D object reconstruction in complex scenes from single or multi-model data
- Semantic interpretation of the entire scene from data of various origins
- Handling noisy or out-of-distribution input data, including techniques for uncertainty estimation and uncertainty propagation
- Neural Radiance Fields

WG 4: AI/ML for Geospatial Data

- Applications of AI/ML in Geospatial Data Analysis
- Scalable AI/ML for Large-scale Geospatial Data Analysis
- Integrating Multiple Data Sources for AI/ML in Geospatial Applications
- WG 5: Temporal Geospatial Data Understanding
 - Machine learning and deep learning for time-series data
 - Dynamic scene understanding from image or LIDAR sequences
 - Multi-source, multi-view, multi-temporal, multi-modal image analysis

WG 6: Cultural Heritage Data Acquisition and Processing

- Remote Sensing in Cultural Heritage.
- Geospatial Technologies for Damaged Heritage Reconstruction

WG 7: Underwater Data Acquisition and Processing

- Remote sensing for mapping and monitoring the underwater environment
- Optical bathymetry
- Underwater mapping: challenges and opportunities

WG 8: Environmental & Infrastructure Monitoring

- Environmental monitoring in the World's most important mountain range
- Urban environmental monitoring for anthropogenic activity mitigation

WG 9: Metrology

- Accuracy and uncertainty in vision metrology
- Applications of vision metrology

ICWG II/Ia: Digital Construction: Reality Capture, Automated Inspection, and Integration to BIM

- Geospatial Technologies for construction engineering
- Computer vision in construction
- Extended reality visualization of building elements

ICWG II/Ib: Autonomous Sensing Systems and Their Applications

- Autonomous path planning, SLAM, navigation, and VLOS/BVLOS exploration
- Collaborative and swarm platforms for Geospatial applications
- Next-generation autonomous platform applications

Extended Abstracts

The abstract submissions will be **single-blind** and should be at most 1000 words. Accepted abstracts will be published as full papers at the ISPRS International Archives of Photogrammetry and Remote Sensing. Abstracts should follow the guidelines for abstract submission <u>here</u>. Abstracts are expected to include a short discussion on related work, preliminary results, and a selected list of references.

Full papers

Full-paper submissions must be formatted following the ISPRS format (templates for Word and Latex can be found <u>here</u>), with a max length of 8 pages, including references. Submissions will be **double-blind** and should include "**Commission II/WG#**" before the keywords to denote which working group you are submitting your contribution to. The accepted papers will be published in the ISPRS Annals of Photogrammetry, Remote Sensing, and Spatial Information Sciences.