



**ISPRS
GEOSPATIAL
WEEK 2023**



**Arab Academy
for Science, Technology
& Maritime Transport**

**The ISPRS 2023 Geospatial Week
(Egypt GSW'2023)**

Remote Sensing For Better Future

Cairo, Egypt, September 2-7, 2023



ISPRS GSW2023 Best Workshop Presentation Award

Paper ID	Authors	Paper Title	Workshop
614	Roel de la Cruz, Paul Leonard Atchong Hilario	MONITORING OIL SPILL PROGRESSION AND OIL SPILL VOLUME USING SATELLITE IMAGES	Satellite Remote Sensing Workshop
670	Yan Xiang, Zhongqi Li, Ningbo Wang, Ling Pei, Wenxian Yu	IONOSPHERIC TEMPORAL-SPATIAL CORRELATION ANALYSIS USING GNSS NETWORKS OVER CHINA	Precision GNSS Workshop
347	Yerassyl Koshan, Raja Manish, Mina Joseph, Ayman Habib	ALTERNATIVE LIDAR TECHNOLOGIES FOR STOCKPILE MONITORING AND REPORTING	Indoor 3D Workshop
609	Zifan Zhang, Gyoungmin Kang, Mengchi Ai, Naser El-Shiemy	VANISHING POINT AIDED LANE DETECTION USING A MULTI-SENSOR SYSTEM	Mobile Mapping Technologies Workshop
358	Ahmed Mansour, Wu Chen, Duojie Weng, Yang Yang, Jingxian Wang	Leveraging human mobility and pervasive smartphone measurements-based crowdsourcing for developing self-deployable and ubiquitous indoor positioning systems	Precision GNSS Workshop
440	Xiaoqiong Qin, Yuanjun Huang, Xuguo Shi, Linfu Xie, Xiangsheng Chen	SURFACE DISPLACEMENT MONITORING OF SUBURBAN EXPRESSWAY UNDER CONSTRUCTION BASED ON SENTINEL-1 SBAS-INSAR ANALYSIS	SARcon 2023 Workshop
567	Salma Bijou, Lucie Kupková, Markéta Potůčková, Lucie Červená, Jakub Lysák	EVALUATION OF THE BARK BEETLE GREEN ATTACK DETECTABILITY IN SPRUCE FOREST FROM MULTITEMPORAL MULTISPECTRAL UAV IMAGERY	UAV-based mapping Workshop
444	Siqi Du, Shengjun Tang, Weixi Wang, Xiaoming Li, Renzhong Guo	Tree-GPT: Modular Large Language Model Expert System for Forest Remote Sensing Image Understanding and Interactive Analysis	Smart Forests Workshop
423	Shelley Haupt, Bolelang Sibolla, Lizwe Wandile Mdakane	Time series InSAR analysis for slope stability monitoring using Sentinel-1 in open pit mining	Openness in Geospatial Workshop
725	yuan yuan wang, rui sun	A novel GPS fault detection and exclusion algorithm aided by IMU and VO data for vehicle integrated navigation in urban environments	Precision GNSS Workshop
311	Penxiang Su, Wei Huang	HUMAN MOBILITY PATTERNS AMONG DIFFERENT PERIODS DURING WEEKDAYS AND WEEKENDS	GeoHB 2023 Workshop

427	Binliang Wang, Yuan Zhuang, Nashwa El-Bendary	4D radar/IMU/GNSS integrated positioning and mapping for large-scale harsh environments	Robotics for Mapping Workshop
514	Meng-Lun Tsai, Kai-Wei Chiang, Chih-Yun Hsieh, Sean Lin, Surachet Srinara, Yu-Ting Chiu	Alternative GCP Sources for Accurate HD Map Production	Mobile Mapping Technologies Workshop
169	Mona Goebel, Dorota Iwaszczuk	BACKPACK SYSTEM FOR CAPTURING 3D POINT CLOUDS OF FORESTS	Robotics for Mapping Workshop
515	Junjie Zhang, Kourosh Khoshelham, Amir Khodabandeh	Fast converging lidar-aided precise point positioning: A case study with low-cost GNSS	Precision GNSS Workshop
785	Kai-Wei Chiang, CHI-HSIN HUANG, Yu-Ting Chiu, Ting-Chun Wu, Syun Tsai, Kuan-Ying Lin	Robust Autonomous Vehicular Navigation System Using RIMU-based INS/GNSS Integrated Scheme	Mobile Mapping Technologies Workshop
321	Tomislav Medic, Nicole Manser, Norbert Kirchgessner, Lukas Roth	TOWARDS WHEAT YIELD ESTIMATION IN PLANT BREEDING FROM INHOMOGENEOUS LIDAR POINT CLOUDS USING STOCHASTIC FEATURES	Laser Scanning 2023 Workshop
519	Weitao Yue, Xiaowei Zhao	An Investigation of Super-Resolution for Cross-Domain Building Extraction using Transformer	AI-PC Workshop
155	Martin Cubaud, Arnaud Le Bris, Laurence Jolivet, Ana-Maria Olteanu-Raimond	Comparison of two data fusion approaches for land use classification	ISSDQ2023 Workshop
230	Julian Berndt, Henry Meißner, Thomas Kraft	On the accuracy of yolov8-CNN regarding detection of humans in nadir aerial images for search and rescue applications	AI-PC Workshop
134	Toshihiro Osaragi	CELL PHONE STATISTICS-BASED PREDICTION OF SPATIOTEMPORAL DISTRIBUTION OF STRANDED PEOPLE WALKING HOME AFTER SEVERE EARTHQUAKE IN TOKYO AND ESTIMATES OF CROWDING AT FACILITIES FOR STRANDED PERSONS	GeoHB 2023 Workshop
212	Wouter A. J. Van den Broeck, Louise Terryn, Wout Cherlet, Zane T. Cooper, Kim Calders	Three-dimensional deep learning for leaf-wood segmentation of tropical tree point clouds	Laser Scanning 2023 Workshop

500	Mareike Dorozynski	Addressing class imbalance for training a multi-task classifier in the context of silk heritage	Cultural Heritage Workshop
537	Felipe Ferrari, Matheus Pinheiro Ferreira, Raul Queiroz Feitosa	Fusing Sentinel-1 and Sentinel-2 images with transformer-based network for deforestation detection in the Brazilian Amazon under diverse cloud conditions	Smart Forests Workshop
493	Helena Laasch, Tomislav Medic, Andreas Wieser	Towards Assessing Sandstone Surface Moisture and Degradation Level from Radiometrically Corrected TLS Intensity Data	Laser Scanning 2023 Workshop
165	Michael Koelle, Volker Walter, Stefan Schmohl, Uwe Soergel	Learning on the Edge: Benchmarking Active Learning for the Semantic Segmentation of ALS Point Clouds	Semantic 3D Workshop
448	Xiaochen Wang, Haiyun Yao, Yangyang Ma, Xinlian Liang	A COMPARISON STUDY OF LOW-COST PERSONAL LASER SCANNING SYSTEMS FOR FOREST PLOT-LEVEL INVENTORIES	Smart Forests Workshop
604	Nour Aburaed, Mina Al-Saad, Mohammed Q. Alkhatib, Mohammad Sami Zitouni, Saaed Al Mansoori, Hussain Al-Ahmad	SEMANTIC SEGMENTATION OF REMOTE SENSING IMAGERY USING AN ENHANCED ENCODER-DECODER ARCHITECTURE	SPACE Workshop
636	Mengchi Ai, Mohamed Elhabiby, Ilyar Asl Sabbaghian Hokmabadi, Naser El-Sheimy	LIDAR-INERTIAL NAVIGATION BASED ON MAP AIDED DISTANCE CONSTRAINT AND FACTOR GRAPH OPTIMIZATION	Navigation, Guidance Workshop
719	Eslam Mounier, Emma Dawson, Mohamed Elhabiby, Michael Korenberg, Aboelmagd Nouredin	INVESTIGATING THE COMPLEMENTARY USE OF RADAR AND LIDAR FOR POSITIONING APPLICATIONS	Navigation, Guidance Workshop
404	Yu-Ting Chiu, Srinara Surachet, Meng-Lun Tsai, Jou-An Chen, Kai-Wei Chiang, El-Sheimy Naser	Evaluating Navigation Performance of Elastically Constructed HD Map with Multi-Sensor Fusion Engine System	Mobile Mapping Technologies Workshop
602	Mattia Balestra, Roberto Pierdicca, Lorenzo Cesaretti, Giacomo Quattrini, Adriano Mancini, Andrea Galli, Eva Savina Malinverni, Simona Casavecchia, Simone Pesaresi	A comparison of pre-processing approaches for remotely sensed time series classification based on functional analysis	ADP Workshop

479	Mustafa Can Ozkan	Q-Learning-Based Route Exploration From Observations	GeoHB 2023 Workshop
224	Toshihiro Osaragi, Noriaki Hirokawa	EFFECTS OF INFORMATION COLLECTION ON STREET-BLOCKAGE FOR NAVIGATION OF FIRE ENGINES IN A MAJOR EARTHQUAKE	Navigation, Guidance Workshop
532	Zhaoyi Wang, Matej Varga, Tomislav Medić, Andreas Wieser	Assessing the alignment between geometry and colors in TLS colored point clouds	Laser Scanning 2023 Workshop
722	F. Galdames, P. González, F. Magni-Pérez, S.M. Funk, F. Lepín, R. Saavedra, H.J. Hernández	CLASSIFICATION OF TREES IN HYPERSPECTRAL CANOPY DATA USING MACHINE LEARNING: COMPARATIVE ANALYSIS OF FOREST STRUCTURE COMPLEXITY	Smart Forests Workshop
831	Bolelang Hilda Sibolla, Raymond Nkadameng Molapo, Lufuno Maxwell Vhengani, Lizwe Wandile Mdakane	Systems and Architectural Support for Open Data Principles: A marine earth observation perspective	Openness in Geospatial Workshop
640	Tamer ElGharbawi	Monitoring Land Subsidence in Egypt's Northern West Coast Using Interferometric Synthetic Aperture Radar	SARcon 2023 Workshop
653	Michele Grimaldi, David Nakath, Mengkun She, Kevin Köser	Investigation of the Challenges of Underwater-Visual-Monocular-SLAM	Underwater Mapping Workshop
115	Jesus Balado Frias, Giang Nguyen	CHATGPT FOR POINT CLOUD 3D OBJECT PROCESSING	AI-PC Workshop
579	Marko Radanovic, Kourosh Khoshelham, Clive Fraser, Debaditya Acharya	Continuous BIM Alignment for Mixed Reality Visualisation	Digital Construction Workshop
343	Anna-Maria Raita-Hakola, Samuli Rahkonen, Juha Suomalainen, Lauri Markelin, Raquel Oliveira, Teemu Hakala, Niko Koivumäki, Eija Honkavaara, Ilkka Pölönen	COMBINING YOLO V5 AND TRANSFER LEARNING FOR SMOKE-BASED WILDFIRE DETECTION IN BOREAL FORESTS	Smart Forests Workshop