Detailed Schedule

June 20

Tutorial	Function Room 405A
	Chair: Chenglu Wen; Siqi Shen
Time	Content
14:00-15:00	The 3D Data Structure and Modeling Techniques for Digital Twins
	Hongchao Fan *Norwegian University of Science and Technology*
15:00-16:00	Muti-Sensor Fusion for Localization and Mapping
	Yuan Zhuang *Wuhan University*
16:00-17:00	Cross-view 3D Data Fusion for Modeling
	Rongjun Qin *The Ohio State University*

June 20

Data Challenge	Function Room 405B
	Chair: Xiaoxin Mi; Zhen Dong; Yuzhou Zhou
Time	Content
14:00 - 14:20	Street Scene Modeling and Editing
	Yuzhou Zhou *Oxford University*
14:20 - 14:35	WHU-Urban3D & WHU-Lane3D & WHU-Road3D: Dataset for Fine-Grained Road Understanding
	Xiaoxin Mi, Zhen Cao, Chong liu *Wuhan University of Technology; Wuhan University*
14:35 - 14:50	WHU-Railway3D: Dataset and Benchmarks for Railway Semantic Segmentation
	Bo Qiu *Wuhan University*
15:00 - 15:15	Railway3D Competition: Group1
	Ziyin Zeng *Wuhan University*
15:15 - 15:30	Railway3D Competition: Group2
	Huchen Li *Wuhan University*
15:30 - 15:45	Railway3D Competition: Group3
	Arshia Ghasemlou, Zhouyan Qiu *University of Vigo, Xi'an Jiaotong-Liverpool University*
15:45 - 16:00	Railway3D Competition: Group4
	Junjie Zhang *Chongqing University*
16:00 - 16:15	Lane3D Competition: Group1
	Lihao Zhao *Wuhan University of Technology*
16:15 - 16:30	Announcement of Competition Results and Winning Teams
	Zhen Dong *Wuhan University*

June 21

Opening Ceremony, Keynote Speech		Grand Ballroom AB
Time	Content	
07:30-12:00	Registration	
08:30-09:00	Welcome Speech	*Host*: Chenglu Wen
09:00-09:30	*Keynote*: Geometry and Semantics for Dynamic 3D Reconstruction	*Host*: Naser El-Sheimy
	Speaker: Prof. Christian Heipke	
09:30-10:00	*Keynote*: China's National 3D Mapping Program and Applications	
	Speaker: Prof. Jun Chen	
10:00-10:30	Coffee Break	
10:30-11:00	*Keynote*: Trends on the Use of Mobile Mapping Systems and Geoinformation from the Perspective of A NMCA	*Host*: Cheng Wang
	Speaker: Prof. Nicolas Paparoditis	
11:00-11:30	*Keynote*: The Invisible Engine: How Inertial Navigation Drives Mobile Mapping and Autonomous Navigation	
	Speaker: Prof. Naser El-Sheimy	
11:30-12:00	*Keynote*: Mobile Mapping Technology for 3D City Mapping	
	Speaker: Prof. WenZhong Shi	
12:00-13:30	Lunch	

June 21

Robotic Perception, Mapping, and Navigation	Function Room 402
Chair: Yuan Zhuang, Ville V. Lehtola, Dorota Iwaszczuk, Vincenzo di Pietra, Nashwa EL-Bendary	
Time	Content
13:30-13:45	AI-driven Navigation for Individual Planning and Swarm Coordination
	Chang Liu *Peking University*
13:45-14:00	Scan to BIM to Digital Twins of Indoor Environments: Progress and Perspective
	Wen Xiao *China University of Geosciences (Wuhan)*
14:00-14:15	Self-Developed Mobile Scanning Equipment-Based 3D Tunnel Understanding and Disease Recognition
	Zhenxin Zhang *Capital Normal University*
14:15-14:30	Fragmentation Calculation Method for Blast Muck Piles in Open-Pit Copper Mines based on Laser Point Cloud Data
	Yongzhi Wang *Suzhou University of Science and Technology*
14:30-14:45	Advanced Sensor Fusion for 3D Perception for Increased Autonomy and Unmanned Systems
	Ville V. Lehtola *University of Twente*
14:45-15:00	Tightly Coupled LiDAR/IMU Localization with Prior Map Assistance in GNSS-Denied Environments
	Shitong Du, Baoguo Yu, Yifan Li, Shuang Li, Zihan Yang *The 54th Research Institute of China Electronics Technology Group Corporation*
15:00-15:15	A Particle Filtering-Based Magnetic Field Map Generation Method Using Smartphones
	Shiyi Chen, Tingwei Wang, Jian Kuang, Xiaoji Niu *Wuhan University*
15:15-15:30	A Training-Free Method for Estimating the Relative Depth of Buildings
	Zhe Chen, Chengjie Li, Peiling Tong, Fuxun Liang, Chen Long, Zhen Dong, Bisheng Yang *Wuhan University*
15:30-15:50	Coffee Break

June 21

Positioning and Navigation	Function Room 402
	Chair:Stefano Gandolfi, Jian Zhou
Time	Content
15:50-16:05	An Integrated Approach to Enhance Navigation Estimation Capabilities for Land Vehicle Applications Using an HD Maps-Aided INS/GNSS/Low-Cost LiDAR Fusion Engine
	Surachet Srinara, Kai-We Chiang, Meng-Lun Tsai, Yi-Feng Chang, Anuthida Ritthiphan, Chalermchon Satirapod *University of Phayao; National Cheng Kung University; Chulalongkorn University*
16:05-16:20	Real-Time Indoor-Outdoor Positioning through VIO-GNSS Fusion for Mobile Devices
	Wanting Zheng, Ruofei Zhong, Xiaochuan Huang, Zhenxing Sun *Capital Normal University; Zhengtu 3D (Beijing) Laser Technology Co., Ltd.*
16:20-16:35	Enhancing Extended-Range Vehicle Trajectory Extraction with Low-Channel LiDAR Roadside Data
	Zhibo Zhao, Hongjuan Zhang, Ziyi Guo, Bijun Li, Disheng Zhang *Wuhan University*
16:35-16:50	Hardware/software Integration of GNSS Receiver in RTX with iMMS SLAM-based System for Insertion of Geometric Constraints in Mixed Indoor-outdoor Mapping Applications
	Antonio Gualtiero Mainardi, Giorgio Paolo Maria Vassena, Luca Perfetti *Università degli studi di Brescia; Gexcel srl*
16:50-17:05	Enhancing Rotation Averaging and Global Positioning with an Adaptive Robust Kernel
	Chunqi Dai, Sagi Filin *Technion - Israel Institute of Technology*
17:05-17:20	Integration of PPP-RTK/INS/Vision based on the Combinatorial Optimization for Urban Vehicle Navigation
	Shujie Zhou, Zihao Wang, Xinye Dai, Shiqi Zheng, Shengfeng Gu *Wuhan University*
17:20-17:35	Optimization and Evaluation of Multi-GNSS PPP-AR Augmented by BDS-3 Multi-Frequency Combination
	Wei Sun, Chen Liang, Wei Ding, Haonan Chen *Liaoning Technical University*
17:35-17:50	Smartphones as Navigation Unit: Study on the Accuracies of Trajectories from Low Cost Sensors
	Matteo Cappuccio, Luca Tavasci, Stefano Gandolfi *University of Bologna*

June 21

Autonomous Driving	Function Room 401
	Chair: Bijun Li, Hongjuan Zhang
Time	Content
13:30-13:45	Neuromorphic Vision-Based Positioning Approaches for High-Dynamic Environments
	Fuqiang Gu *Chongqing University*
13:45-14:00	Distributed Simulation Platform of Vehicle-Infrastructure-Map Systems (VIMS) for Autonomous Driving and Its Applications
	Zhaozheng Hu *Wuhan University of Technology*
14:00-14:15	Geographic Information Security Protection Technologies for Integrated Vehicle-Road-Cloud Systems
	Yanyan Xu *Wuhan University*
14:15-14:30	Spatiotemporal Intelligence-Driven Motion Perception of Intelligent Connected Vehicles
	Hongjuan Zhang *Wuhan University*
14:30-14:45	Generating Transferable Traffic Object Adversarial 3D Point Clouds via Momentum-based Decompose Perturbation
	Weiquan Liu, Min Xie, Xingwang Huang, Jiasheng Su, Yanwen Sun, Shiwei Lin, Jinhe Su, Zongyue Wang, Guorong Cai *Jimei University*
14:45-15:00	Deep Learning in Visual Odometry for Autonomous Driving
	Luca Morelli, Paweł Trybała, Armando Vittorio Razzino, Fabio Remondino *Fondazione Bruno Kessler; University of Udine*
15:00-15:15	HD Map in the Loop Framework for End-to-End Autonomous Driving
	Shan He, Shen Ying, Lu Tao, Shi Chen, Yang Zhang *Wuhan University*
15:15-15:30	PosiFusion: A Vehicle-to-Everything Cooperative Perception Framework with Positional Prior Fusion
	Huan Qiu, Youchen Tang, Jian Zhou, Chengzhuo Xiong, Kai Liu, Fuxin Xie, Bijun Li *Wuhan University*
15:30-15:50	Coffee Break

June 21

Large-scale 3D Reconstruction	Function Room 401
	Chair: Bing Wang, Xiaoxin Mi
Time	Content
15:50-16:05	Semantic-Aware 3D Gaussian Reconstruction via SAM-Guided Annotation and Probabilistic Weak Supervision
	Zhaoning Zhang, Tengfei Wang, Xin Wang, Zongqian Zhan *Wuhan University*
16:05-16:20	To Glue or Not to Glue? Classical vs Learned Image Matching for Mobile Mapping Cameras to Textured Semantic 3D Building Models
	Simone Gaisbauer, Prabin Gyawali, Qilin Zhang, Olaf Wysocki, Boris Jutzi *Technical University of Munich*
16:20-16:35	Weakly-textured Cylindrical Object Reconstruction via Multi-View Tangent Dihedral Angle Constraints
	Xinbo Zhao, Lei Qin, Yansong Duan *Wuhan University; The Hubei Luojia Laboratory*
16:35-16:50	GAGS: Gradient-Guided Adaptive Gaussian Splatting for Efficient and Geometry-Regularized Surface Reconstruction
	Yongmao Hou, Tengfei Wang, Xin Wang, Zongqian Zhan *Wuhan University*
16:50-17:05	OneStep-GSPE: an Efficient 3D Gaussian Splatting based Image Pose Estimation
	Yuhao Li, Yipeng Lu, Jianping Li, Zhen Dong, Bisheng Yang *Wuhan university; Nanyang Technological University*
17:05-17:20	A Hybrid 3DGS-based Method for Improving TDOM Generation
	Xiang Wang, Yiwei Xu, Wendi Zhang, Xin Wang, Zongqian Zhan *Wuhan University*
17:20-17:35	Surveys on Feed-forward 3R Methods for High-resolution Photogrammetric Images via Image Partitioning Framework
	Zhe Shen, Mengmeng Shu, Guanbo Wang, Yifei Yu, Zongqian Zhan, Xin Wang *Wuhan University*

June 21

Point Cloud Processing-I	Function Room 405A
	Chair: Olaf Wysocki, Yan Xia
Time	Content
13:30-13:45	3D Data for 3D Reconstruction
	Rongjun Qin *The Ohio State University*
13:45-14:00	3D Localization in Urban Environments
	Yan Xia *University of Science and Technology of China*
14:00-14:15	Urban Digital Twins - Robust Semantic Segmentation catering for Robust Reconstruction
	Olaf Wysocki *Technical University of Munich*
14:15-14:30	Coarse-to-fine Point Cloud Registration Based on Superpoint Overlap Prediction
	Mengchong Sun, Jinyu Tan, Yutao Zhang, Juntao Yang, Xue Zhang, Yuan Liu, Jianzhong Chen *Shandong University of Science and Technology; Shandong Provincial Institute of Land Surveying and Mapping*
14:30-14:45	DeepSeek MOE Enhanced PointNet++: Dynamic Mixture of Experts for Point Cloud Segmentation
	Yinzhen Wang *Capital Normal University*
14:45-15:00	Vertical Structure-Driven Indoor Spatial Partitioning: A Hybrid Framework for CAD-Compatible Modeling from 3D Point Clouds
	Junbin Xiao, Zhipeng Luo, Zhehao Wang, Gongji Wu, Jonathon Li, Michael Chapman *Minnan Normal University; University of Waterloo; Toronto Metropolitan University*
15:00-15:15	Patch-based Graph Cut Optimization for 3D Line Segment Extraction of Building Structures from Outdoor Point Cloud Data
	Ruoming Zhai, Peng Wan, Xianquan Han, Jianzhou Li, Yifeng He, Bangning Ding *Changjiang River Scientific Research Institute; Wuhan University*
15:15-15:30	VRFrame: Viewpoint-Robust Framework for LiDAR-based Place Recognition
	Sheng Ao, Minghang Zhu, Yuxin Guo, Yongshu Huang, Chen Liu, Yuyang Yang, Dunqiang Liu, Wen Li *Xiamen University*
15:30-15:50	Coffee Break

June 21

Point Cloud Processing-II	Function Room 405A
	Chair: Hiroshi Masuda, Zhizhong Kang
Time	Content
15:50-16:05	Unleashing the Reasoning Capabilities of Vision Language Models for Effective Image-based Roadside Tree 3D Measurement Chen Long, Zhen Dong, Bisheng Yang *Wuhan University*
16:05-16:20	Efficient and Accurate Classification of MMS Point Clouds Using Multi-Scale Features Makoto Nakano, Keita Hiraoka, Genki Takahashi, Hiroshi Masuda *The University of Electro-Communications; Kokusai Kogyo Co., Ltd.*
16:20-16:35	Improving Image Alignment in Vineyard Environment with Deep Learning Image Matching Andrea Maria Lingua, Filiberto Chiabrando, Francesca Gallitto, Stefania Manca, Alessio Martino *Politecnico Di Torino*
16:35-16:50	BuildingRenderingLLM: A Multi-modal Foundation Model for High-Fidelity Building Texture Mapping from Point Clouds Hongxin Yang, Jonathan Li, Hongjie He, Lingfei Ma, Dedong Zhang, Michael Chapman *East China Normal University; University of Waterloo; Toronto Metropolitan University*
16:50-17:05	RTCNet: A Novel Real-time Triple Branch Network for Pavement Crack Semantic Segmentation Bin Liu, Lingfei Ma, Haiyan Guan, Jonathan Li, Michael A. Chapman *Nanjing University of Information Science and Technology; East China Normal University; University of Waterloo; Toronto Metropolitan University*
17:05-17:20	Channel Extraction and Geometric Parameters Measurement Based on Point Clouds Qingguo Zhang, Xiaolong Li, Huifang Feng, Jian Zhong, Yuehui Li, Michael A. Chapman, Jonathan Li *Xihua University; Toronto Metropolitan University; University of Waterloo*
17:20-17:35	Multi-scale Point Cloud Completion Networks Incorporating Attention Mechanisms Cong Zhou, Minglei Li, Jiahui Chai, Leheng Xu, Junnan Zhang, Dazhou Wei *Nanjing University of Aeronautics and Astronautics; Chinese Aeronautical Radio Electronics Research Institute*
17:35-17:50	Autonomous Semantic Mapping for SLAM Systems Yong He, Chi Chen, Leyi Zhao, Yuhang Xu, Shangzhe Sun, Zongtian Hu, Ang Jin *Wuhan University*

June 21

Multi-modal Data Fusion-I	Function Room 405B
	Chair: Hongchao Fan, Mengchi Ai
Time	Content
13:30-13:45	Research on Multi-Source Data Fusion Based Vehicle Detection Algorithms
	Jianghong Zhao *Beijing University of Civil Engineering and Architecture*
13:45-14:00	Virtual Restoration of Cultural Heritage
	Miaole Hou *Changan University*
14:00-14:15	Multiple Source Data Integration and quality predication in Digital Grain Warehouse
	Bo Mao *Nanjing University of Finance and Economics*
14:15-14:30	Building Facade Structure Extraction Method using Image-based Laser Point Cloud
	Yongzhi Wang *Suzhou University of Science and Technology*
14:30-14:45	MultiTrans-LC: Multimodal Fusion Transformer for Remote Sensing Land Cover Classification
	Qixuan Wang, Ning Li, Yiheng Chen, Hainiu Zhu, *Nanjing University of Aeronautics and Astronautics*
14:45-15:00	Multi-Modal Aided RGBD-to-Point Clouds Registration with Coarse-to-Fine Graph Matching
	Mengchi Ai, Mohamed Elhabiby, Xuan Zhao, Naser El-Sheimy *University of Calgary; Micro Engineering Tech. Inc; Xi'an Jiaotong University*
15:00-15:15	Joint Calibration Method of Thermal Infrared-Visible Based on Cross Modal Feature Matching
	Shan Su *Wuhan university*
15:15-15:30	Change Detection in Urban Environments Using Dashcam Videos
	Aziza Zhanabatyrova, Yu Xiao, Fabio Remondino *Aalto University; Fondazione Bruno Kessler*
15:30-15:50	Coffee Break

June 21

Multi-modal Data Fusion-II	Function Room 405B
	Chair: Andrea Maria Lingua, Shihua Li
Time	Content
15:50-16:05	A Method for Detecting Hidden Faults in Power Lines by Combining Visible and Thermal Infrared Images
	Yuting Qin, Yansong Duan *Wuhan University*
16:05-16:20	Multimodal GNSS/MARG Resilient Integration for Vehicular Attitude Estimation
	Wei Ding, Huifang Yan, Chen Liang, Haonan Chen *Liaoning Technical University*
16:20-16:35	ISLDV: Robust Iterative Stereo-LiDAR Depth Volume for Long Range Depth Completion
	Yunqi Du, Hongjuan Zhang, Hongyu Shi, Wenzhuo Li, Si Xu, Zhen Dong, Bijun Li *Wuhan University; Wuhan University of Science and Technology*
16:35-16:50	Automated Detection and Mapping of Pavement Cracks from Videos for Road Inspections
	Giulio Perda, Mustafa Eid, Nazanin Padkan, Luca Morelli, Fabio Remondino *Fondazione Bruno Kessler; University of Udine*
16:50-17:05	A Multi-source Heterogeneous Point Cloud Fine Registration Method for Large-scale Outdoor Scenes
	Mengbing Xu, Ruofei Zhong, Xueting Zhong *Capital Normal University*
17:05-17:20	Cross-source Registration of Point Clouds in Urban Scenes using Structured Features
	Shu Peng, Junnan Zhang, Jiarui Tang, Minglei Li *Nanjing University of Aeronautics and Astronautics*
17:20-17:35	Low-Cost Sensors for the Documentation and Planned Maintenance of Cultural Heritage
	Alessio Martino, Alessandra Spadaro, Francesca Matrone, Andrea Maria Lingua *Politecnico di Torino*
17:35-17:50	Research on 3D Virtual Scene Reconstruction and Application Based on Multi-source Data Fusion
	Hao Tang, Yuhang Wang, Xinwu Liu, Ziyi Wang, Chenghao Li, Zefan Zhang, Minfeng Xing, Shihua Li *University of Electronic Science and Technology of China*

June 22

Mobile Measurement Technology for Complex Scenes	Function Room 402
	Chair: Yan Xing, Meng Zou
Time	Content
08:30-08:45	Multisource Dataset for Intelligent Precise Perception and Manipulation of Extraterrestrial Object Surface
	Yan Xing *Beijing Institute of Control Engineering*
08:45-09:00	In-Situ Testing and Analysis of Bearing and Shearing Parameters of Lunar Regolith in Polar Regions
	Meng Zou *Aerospace Information Research Institute in Chinese Academy of Sciences*
09:00-09:15	Localization and Topographic Mapping in Teleoperations for Zhurong Rover in Tianwen-1 Mission
	Wenhui Wan *Aerospace Information Research Institute in Chinese Academy of Sciences*
09:15-09:30	3D Mapping of Underground Tunnels Through Thermal Imagery Depth Estimation
	Zhihua Xu *China University of Mining and Technology*
09:30-09:45	Autonomous Localization and Mapping Methods for Mobile Robots in Complex Underground Spaces
	Xiaohu Lin, YiNan Gao, Zhiyue Jiang, Tao Yan, Qingyu Zhang, Aiqiang Ma *Xi'an University of Science and Technology*
09:45-10:00	Dislocation Detection of Shield Tunnel Segments Under Non-Uniform Deformation Conditions Using RMLS Point Clouds
	Ze You, Liying Wang *Liaoning Technical University*
10:00-10:15	An Improved Multi-rule Region Growing Method for Point Cloud Segmentation of Rock Structural Planes
	Mengxi Sun, Yunsong Duan, Hui Cao, Wei Qin *Wuhan University*
10:15-10:30	Coffee Break

June 22

Autonomous Mapping of Unexplorative Space	Function Room 402
Chair: Chi Chen, Xieyuanli Chen	
Time	Content
10:30-10:50	Active Perception and Mobile Manipulation with Autonomous UAVs
	Boyu Zhou *Southern University of Science and Technology*
10:50-11:10	Semantic Mapping in Outdoor Dynamic Environments
	Xieyuanli Chen *National University of Defense Technology*
11:10-11:25	3D Mapping and Visual Geo-localization through 360° Spherical Images
	San Jiang *Shenzhen University*
11:25-11:40	Sensor Fusion for Real-Time Localization and Mapping
	Zikang Yuan *The Hong Kong University of Science and Technology*
11:40-11:50	Autonomous Localization and Mapping in Complex Underground Spaces Using Multisource Data
	Xiaohu Lin *Xi'an University of Science and Technology*
11:50-12:00	Robust and Degeneracy-Aware Multi-Sensor Fusion Odometry
	Weitong Wu *Hohai University*
12:00-12:10	From 1 to N: enhancing LiDAR SLAM with information fusion for precise mobile mapping
	Yangzi Cong *Shandong University*
12:10-12:20	Robotic Implicit Neural Mapping
	Yue Pan *The University of Bonn, Germany*

June 22

Simultaneous Localization and Mapping-I	Function Room 401
	Chair: Pawel Trybała, Charles Toth
Time	Content
08:30-08:45	A Portable V-SLAM-Based System with AI Capabilities
	Nazanin Padkan, Samuele Facenda, Luca Morelli, Ahmad Elalailyi, Fabio Remondino *Fondazione Bruno Kessler; University of Udine; Politecnico di Milano; University of Trento*
08:45-09:00	Acoustic Sensors-Based Collaborative Navigation in Search and Rescue Applications
	Nicola Cigarini, Marcello Sorge, Andrea Masiero, Angelo Cenedese, Giulia Michieletto, Alberto Guarnieri, Charles Toth, Antonio Vettore *University of Padua; The Ohio State University*
09:00-09:15	STELVIO: Exploring Factor Graphs for a Robust Stereo LiDAR-Visual-Inertial Odometry
	Paweł Trybała, Luca Morelli, Samuele Facenda, Armando Vittorio Razzino, Fabio Remondino *Bruno Kessler Foundation; University of Udine*
09:15-09:30	Doppler-Enhanced FMCW LiDAR Odometry Based on Linear Continuous-Time Representation
	Weitong Wu, Chi Chen, Bisheng Yang, Yuhang Xu, Yueqian Shen, Xiufeng He *Hohai University; Wuhan University*
09:30-09:45	LPR-Mate: A Lightweight Universal Reranking-based Optimizer for LiDAR Place Recognition in Challenging Environments
	Zhenghua Zhang, Mingcong Shu, Meng Sun *China University of Mining and Technology; Huaiyin Normal University*
09:45-10:00	LRMO: A Lightweight and Redundant Multi-Modal Odometry Framework for Robust Intelligent Vehicle Localization
	Xinye Dai, Liang Chen, Zhiyong Tu, Zihao Wang, Shiqi Zheng, Shujie Zhou, Fenfen Lin, Weiwei Song *Wuhan University; Beijing Institute of Tracking and Telecommunication Technology*
10:15-10:30	Coffee Break

June 22

Simultaneous Localization and Mapping-II	Function Room 401
	Chair: Yue Yu, Jianping Li
Time	Content
10:30-10:45	Frame-to-Frame LiDAR Association and Its Applications in Multi-Sensor Fusion
	Hailiang Tang *Wuhan University*
10:45-11:00	Data and Physical Model Dual-driven based Autonomous Navigation using Self-contained Sensors under Unknown Environments
	Yue Yu *The Hong Kong Polytechnic University*
11:00-11:15	Robust Perception and Localization for Robots in Unknown Dynamic Environments
	Xieyuanli Chen *National University of Defense Technology*
11:15-11:30	How Do Traditional Descriptors Enable Efficient Registration of ULS-TBLS Point Clouds in Weakly Structured Forests?
	Junxiang Tan *Chengdu University of Technology*
11:30-11:45	Lidar-Vision-Language Semantic Map for Real-World Robot Navigation
	Shoubin Chen *Guangdong Laboratory of Artificial Intelligence and Digital Economy*
11:45-12:00	A Laser Odometry Method for Degenerate Scenarios based on Local Point Cloud Classification
	Chang Yi, Donghai Xie, Zhenxing Sun, YinZhen Wang, Ran Xiao, Liuyan Guo, Zhibo Wang, Yibo Fu, Ruofei Zhong *Capital Normal University*
12:00-12:15	LiDAR SLAM Global Positioning Uncertainty Estimation Based on Lie Group and MHSS theory
	Minzhe Liu, Hongjuan Zhang, Zhibo Zhao, Bijun Li *Wuhan University*

June 22

Mobile Mapping System Equipment	Function Room 405A
	Chair: Jiasong Zhu, Baoding Zhou
Time	Content
08:30-08:45	Innovation and Implementation of Precision Engineering Surveying Technology and Equipment for Smart Inspection of High-Altitude Reservoirs
	Jiasong Zhu *Shenzhen University*
08:45-09:00	Towards the Age of Spatial Machine Intelligence: Efficient Multi-Modal 3D Scene Modeling
	Bing Wang *The Hong Kong Polytechnic University*
09:00-09:15	Development and Application of an Intelligent UAV LiDAR Processing System for Power Grid Infrastructure
	Yiping Chen *Sun Yat-sen University*
09:15-09:30	3D Laser Equipment for Air-ground Combined Measurement and Its Application in Power Infrastructure Maintenance
	Haoxuan Xu *Wuhan University*
09:30-09:45	A Tightly Coupled LiDAR/IMU/GNSS Navigation System based on GNSS NLOS Correction
	Zhen Zhang, Paipai Wu, Yangzi Cong, Wenpeng Zong, Wenfeng Nie, Tianhe Xu *ShanDong University; Xi'an Institute of Surveying and Mapping*
09:45-10:00	High Resolution 3D Data for Pavement Condition Assessment in a Digital Twin Perspective
	Vittorio Scolamiero, Piero Boccardo *Sapienza Università di Roma; Politecnico di Torino*
10:00-10:15	Detection of Hidden Faults in Electric Power Facilities Combining SAM and U-Net
	Ran Duan *Shanghai Ocean University*
10:15-10:30	Coffee Break

June 22

UAV Mapping	Function Room 405A
	Chair: Shen Ying, Bo Guo
Time	Content
10:30-10:45	UAV-based Collaborative Mapping Framework with Environmental Semantic Extraction
	Haonan Cai, Xuanke Zhong, Baoding Zhou *Shenzhen University*
10:45-11:00	Dam Leakage Detection Based on Unmanned Aerial Vehicle Multi-Sensor
	Tongqi Wang *Wuhan University*
11:00-11:15	Research on Improved Genetic Algorithm for UAV LiDAR Route Planning Method
	Zhixuan Zhang, Feifei Tang, Kunyang Li *Chongqing Jiaotong University*
11:15-11:30	Anti-Wind Disturbance Algorithms for Small Rotorcraft UAV
	Wuyuntana Gongzhabayier, Feifei Tang, Huayu Zhang, Yini Cheng, Yafei Hao, Chun Tan *Chongqing Jiaotong University; Yellow River Hydrological Survey and Mapping Bureau; CHINA Gezhouba GROUP Explosive Co., LTD.; Chinese Academy of Sciences*
11:30-11:45	UAV-GIN-SLAM: Geometric-Invariant Neural Matching SLAM for Robust Low-Altitude Navigation in Dynamic Urban Scenes
	Junnan Zhang, Minglei Li, Jiahui Chai, Leheng Xu, Cong Zhou *Nanjing University of Aeronautics and Astronautics; Chinese Aeronautical Radio Electronics Research Institute*
11:45-12:00	BEV Space LiDAR-Camera Fusion Method Based on Attention-Driven Feature Fusion Mechanism
	Leheng Xu, Minglei Li, Cong Zhou, Jiahui Chai, Junnan Zhang *Nanjing University of Aeronautics and Astronautics*
12:00-12:15	High-throughput Plant Height Measurement for the Field Peanuts from Low-cost UAV Photogrammetry
	Mingxuan Song, Yutao Zhang, Liya Hu, Yirou Liu, Juntao Yang, Zhenhai Li, Bo Bai, Guowei Li *Shandong University of Science and Technology; Shandong Academy of Agricultural Sciences*

June 22

Mobile Mapping for Vegetation	Function Room 405B
	Chair: Andrea Masiero, Liying Wang
Time	Content
08:30-08:45	A Novel Approach for Individual Tree Structural Parameter Extraction from ALS Data
	Yanan Liu, Ai Zhang, Peng Gao, Mengxue Xu, Pingbo Hu, Tao Yuan *Beijing University of Civil Engineering and Architecture; Beijing Institute of Engineering Geology*
08:45-09:00	Boundary-Constrained Supervoxel Clustering for Tree Segmentation in Broadleaf Forests
	Chaoyong Wu *Shenzhen University*
09:00-09:15	Integrating Vegetation Indices and Texture Features from UAV Multispectral Image for Nondestructive Peanut Aboveground Biomass Estimation
	Liya Hu, Yueyang Tan, Dandan Liu, Mingxuan Song, Yirou Liu, Juntao Yang, Zhenhai Li, Bo Bai, Guowei Li *Shandong University of Science and Technology; Shandong Academy of Agricultural Sciences*
09:15-09:30	Identification and Counting of Field Peanut Seedlings Using Improved Centernet from UAV imagery
	Zhisen Wang, Hongyu Zhao, Juntao Yang, Mingxuan Song, Yirou Liu, Zhenhai Li, Bo Bai, Guowei Li *Shandong University of Science and Technology; Shandong Academy of Agricultural Sciences*
09:30-09:45	Reconstruction and Application of Street Tree Models Based on Mobile LiDAR Point Clouds
	Jintao Li, Hangbin Wu *Shandong University of Technology; Tongji University*
09:45-10:00	Graph Self-Attention Network with Semantic Embedding for Stem-Leaf Separation from 3D Point Clouds
	Anhao Yang, Haiyang Wu, Juntao Yang, Zhenhai Li, Bo Bai, Guowei Li *Shandong University of Science and Technology; Shandong Academy of Agricultural Sciences*
10:15-10:30	Coffee Break

June 22

Innovative Technology Forum	Function Room 405B
	Chair: Hangbin Wu, Yiping Chen
Time	Content
10:30-10:45	Large-scale 3D Gaussian Splatting
	Meida Chen *University of southern california institute for creative technologies*
10:45-11:00	Open-World Navigation for Embodied AI
	Changhao Chen *The Hong Kong University of Science and Technology (Guangzhou)*
11:00-11:15	Unsupervised 3D Spatial Understanding of Point Clouds
	Bo Yang *The Hong Kong Polytechnic University*
11:15-11:30	Reconstruction and Application of Street Tree Models based on Mobile LiDAR Point Clouds
	Jintao Li *Shandong University of Technology*
11:30-11:45	Active Panoramic Scanning and Scalable LiDAR Bundle Adjustment for Robust Robot Navigation in Large-Scale Environments
	Jianping Li *Nanyang Technological University*
11:45-12:00	Registration of Multi-Station TLS Point Cloud Balancing Robustness, Efficiency and Accuracy
	Hong Xie *Wuhan University*
12:00-12:15	Advancing Dynamic Scene Mapping: A Geospatial Approach to Multi-Observation Fusion in V2X Systems
	Jian Zhou *Wuhan University*
12:15-12:30	MLS Point Cloud Classification by Deep Learning
	Nan Li *RIEGL Research & Defense GmbH*

June 22

Keynote Speech, Closing Ceremony		Grand Ballroom A
Time	Content	
14:00-14:30	*Keynote*: Mobile Mapping Technology: Recent Developments in the Georeferencing Component	*Host*: Andrea Masiero
	Speaker: Prof. Charles Toth	
14:30-15:00	*Keynote*: Autonomous Mapping of Unexplorative Space	
	Speaker: Prof. Bisheng Yang	
15:00-15:30	*Keynote*: Precision LiDAR Technologies and Its Progress in China	
	Speaker: Prof. Qingzhou Mao	
15:30-16:30	Closing Ceremony	*Host*: Cheng Wang