



MİMAR SİNAN
GÜZEL SANATLAR
ÜNİVERSİTESİ



Information from Imagery



GeoAdvances 2024

GeoAdvances 2024	
11 January 2024 Thursday	
10:00-10:30	Opening Ceremony
10:30-11:00	Keynote 1: Drought Monitoring with Earth Observation Data and Machine Learning Methods Prof.Dr.Elif Sertel
11:00-12:00	Session 1: Remote Sensing Applications Chair:Prof.Dr.Elif Sertel
	Estimation of Sugarcane Yield using Multi-temporal Sentinel 2 Satellite Imagery and Random Forest Regression <i>Alireza Taravat, Gebeyehu Abebe, Berhan Gessesse and Tsegaye Tadesse</i>
	Remote Sensing Data Application to Monitor Carbon Farming Practices <i>Guste Metrikaityte Gudele and Jurate Suziedelyte Visockiene</i>
	A Comparative Study of Satellite Image Resolutions for Detecting Pest Damage in Sunflower Fields <i>Buse Selin Ercan, Bensu Maden, Seda Nur Kara, Filiz Sunar, Tolga Aysal, Neslihan Ozkaya and Ozgur Kaya</i>
	Crop Height Estimation of Wheat Using Sentinel 1 Satellite Imagery Preliminary Results <i>Ömer Gokberk Narin, Çağlar Bayık, Ali İhsan Şekertekin,Sevinç Madenoglu, Melis Özge Pınar, Saygın Abdikan and Fusun Balık Şanlı</i>
	The Role Of Geomatics Engineering in Climate Change Studies <i>Sis Alkan, Reha Metin Alkan and Dursun Zafer Şeker</i>
12:00-12:15	Tea / Coffee Break
12:15-13:15	Session 2: Photogrammetry Applications Chair: Prof.Dr.Dursun Zafer Şeker
	Semantic Point Cloud Segmentation in Urban Environments with 1D Convolutional Neural Networks <i>Silvia Maria González Collazo, Nicolás Canedo-González, Elena González and Jesús Balado</i>
	Randomised Compression Ratios for effective Large Point Cloud Processing using Compressive Sensing <i>Zhouyan Qiu, Saravanan Nagesh, Joaquín Martínez-Sánchez and Pedro Arias</i>
	A Reproducible Approach to Estimate Indoor Space Area on a Mobile LiDAR Dataset Using DBSCAN <i>Berk Anbaroglu and Hasan Berk Karabay</i>
	Monitoring of Glaciers on Horseshoe Island Antarctica Based on a Deep Learning Approach from High Resolution Orthophotos TAE6 & TAE7 <i>Mahmut Oğuz Selbesoğlu, Tolga Bakirman, Mustafa Fahri Karabulut, Esra Günaydın, Oleg Vassilev, Özgün Oktar and Burcu Özsoy</i>

12:15-13:15	Detection and Recognition of Traffic Signs from Data Collected by the Mobile Mapping System <i>Hilal Gezgin and Reha Metin Alkan</i>
13:15-14:15	Lunch
14:15-14:45	Sponsor Presentation: ESRI Türkiye
14:45-15:45	Session 3: Remote Sensing Applications -2 Chair: Assoc.Prof.Dr.Tolga Bakirman
	Fire Weather Index and Forest Fire Danger Mapping Insights from a Case Study in Antalya Manavgat Forest <i>Turkiye Hatice Atalay, Adalet Derviřođlu and Filiz Sunar</i>
	Monitoring forest degradation over four decades using remote sensing and machine learning classification algorithms in Casablanca Bouskoura, Morocco <i>Mohamed Rabii Simou, Nouriddine Houran, Mohamed Benayad, Mehdi Maanan, Safia Loulad and Hassan Rhinane</i>
	Forest Semantic Segmentation Based on Deep Learning Using Sentinel 2 Images <i>Ceyda Hızal, Görkem Gülsu, Hilmi Yavuz Akgün, Bahadır Kulavuz, Tolga Bakirman, Abdurrahim Aydın and Bulent Bayram</i>
	Enhancing Urban Pathfinding For Pedestrians Through Fusion of MLS and HMLS Data <i>Silvia María González Collazo, Jesús Balado, Rosa María Tüñez Alcalde, Iván Garrido, Henrique Lorenzo and Lucía Díaz Vilariño</i>
	60 Year Remote Sensing Observations Revealed Cross Cycle Evolution of The Brunt Ice Shelf in the Context of Global Warming <i>Yuan Cheng, Jiamei Xue, Haomin Yu and Gang Hai</i>
15:45-16:00	Tea/Coffee Break
16:00-17:00	Session 4: Photogrammetry Applications -2 Chair: Prof.Dr.Fusun Balık Şanlı
	Enhancement of Underwater Images with Artificial Intelligence <i>Zeynep Ertan, Berat Korkut, Günsu Gördük, Bahadır Kulavuz, Tolga Bakirman and Bulent Bayram</i>
	An Analysis of Neighborhood Types for Pointnet in Semantic Segmentation of Airborne Laser Scanning Data <i>Zeynep Akbulut, Samed Özdemir, Fevzi Karslı and Mustafa Dihkan</i>
	Integration of Deep Learning Models for Vehicle Counting Towards Optimized Planning of Urban Charging Infrastructures <i>Mohamed Benayad, Hassan Rhinane, Abdelilah Rochd and Mohamed Rabii Simou</i>
	Spatially Aware Landslide Susceptibility Prediction Using a Geographical Random Forest Approach <i>Alihan Teke and Taskin Kavzoglu</i>

GeoAdvances 2024	
12 January 2024 Friday	
10:30-11:00	Keynote 2: 3D Geoinformation: Current Status and Perspectives Prof.Dr.Alias Abdul Rahman
11:00-12:00	Session 5: Urban Information Management Chair: Prof.Dr.Rahmi Nuran Çelik
	BIM-LADM Amalgamation- A Review <i>Ainn Zamzuri, Alias Abdul Rahman, Muhamma Hassan and Peter Van Oosterom</i>
	CITYJSON2RDF A Converter for Producing 3DCity Knowledge Graphs <i>Alper Tunga Akın and Çetin Cömert</i>
	3D Underground Land Administration by Standardized Geoinformation <i>Doğuş Güler</i>
	3D Visibility Analyses Using BIM&GIS Integration <i>Ecenur Çorlu and Ümit Işıkdığ</i>
	Developing 4D Malaysian Marine Cadastre Data Model Based on LADM Preliminary Works <i>Yusuf Hussaini Atulukwu, Muhammad Imzan Hassan and Alias Abdul Rahman</i>
12:00-12:10	Tea / Coffee Break
12:10-13:00	Session 6: Photogrammetry Applications-3 Chair: Prof.Dr.Alias Abdul Rahman
	Quality Assessment for Multi Resolution Segmentation and Segment Anything Model Using Worldview 3 Imagery <i>Elif Ozlem Yilmaz and Taskin Kavzoğlu</i>
	Automatic Ship Detection Using VHR Satellite Images and Different YOLOv5 Models <i>Hatice Kevser Yavuz and Elif Sertel</i>
	Evaluating The Quality of Digital Datasets in terms of Aviation Safety Derived from Stereo Satellite Imagery in Sarawak Malaysia's Airports <i>Serdar Bayburt, Dudu Erol, Ümmügülsüm Bayır, Roland Emang, Lau Boon Seong, Muhammad Imzan Hassan and Abdul Rahman Alias</i>
	Deep Learning Based Scene Classification of Very High Resolution Satellite Imagery for Post Earthquake Damage Assessment A Case Study of the 2023 Kahramanmaraş Earthquakes <i>Dogu Ilmak, Muzaffer Can Iban and Dursun Zafer Seker</i>
13:00-14:00	Lunch
14:00-16:00	Session 7: Remote Sensing Applications-3 Chair: Prof.Dr.Hande Demirel
	Semantic Labeling of 3D Buildings by Using Graph Neural Network (GNN) <i>Hanis Rashidan, Ivin Amri Musliman, Mohammed Jawaluddeen Sani and Alias Abdul-Rahman</i>

14:00-16:00	3D Land Marine Properties Administration in the Context of Sea Level Rise (SLR) - Issues & Challenges <i>Alias Abdul Rahman, Mohammad Imzan Hassan, Ivin Amri Musliman, Hanis Rashidan, Wahyu Marta Mutiarasari, Ainn Zamzuri, Gurcan Buyuksalih, Cem Gazioglu and Irsad Bayirhan</i>
	3D Monitoring of Coastal Erosion Control Structures Using UAV <i>Naoko Sakamoto and Satoshi Nishiyama</i>
	WEBGPU:A New Graphic Api for 3D WEBGIS Applications <i>Ziya Usta</i>
	Experimenting TIN Data Structure for Representing Surface and Subsurface Spatial Objects- Preliminary Work <i>Michael Moses Apeh, Alias Abdul Rahman and Ivin Amri Musliman</i>
	Machine Learning (AI) for Identifying Smart Cities <i>Laaziza Hammoumi and Hassan Rhinane</i>
	Error Analysis of Visual Odometry for a Small Size Unmanned Aerial Vehicle <i>Önder Halis Bettemir</i>
	Bibliometric Analysis of the Greatest Nuclear Disasters:What Is Known So Far and What Are the Prospects <i>Maryna Batur and Reha Metin Alkan</i>
16:00-16:30	Closing Ceremony

GeoAdvances 2024	
13 January 2024 Saturday	
12:00-13:00	Invited Speaker/Keynote
13:00-14:15	Online Session 1: Remote Sensing Applications-4 Chair:Assoc.Prof.Dr.Saygın Abdikan
	Using Optical Satellite Images and Satellite Altimetry Data to Estimate Volume Variations in Dams <i>Ronak Ghanbari, Arash Tayfehrostami, Masoumeh Forouzanfar and Milad Tashakori</i>
	Assessing Air Pollutant Emissions in the Aftermath of the 2021 Forest Fires in Marmaris and Manavgat Türkiye:Insights from Satellite Based Monitoring <i>Çiğdem Şerifoglu Yılmaz</i>
	Trends Analysis of Agricultural Drought in Central Anatolian Basin Turkey <i>Emine Müjgan Ergene, Filiz Bektaş Balçık and Füsun Balık Şanlı</i>
	Methods for Satellite Derived Bathymetry from Sentinel-2 images: A comparison <i>Francesco Giuseppe Figliomeni and Claudio Parente</i>
	Spatial Inventory of Solar Photovoltaic (PV) Installations Using Remote Sensing And Machine Learning: Case of Pampanga Province, Philippines <i>Anne Glydel Dalagan and Jeark Principe</i>
	Mapping and Assessment of the Spatial and Temporal Distribution of Turbidity in Lake Buhi from Sentinel 2 Images Using Geographically Weighted Regression and Normalized Difference Turbidity Index <i>Jommer Medina, Katrine Ann Amaro, Lyanna Marie Cortez and Ariel Blanco</i>
14:15-14:30	Break
14:30-15:30	Online Session2: Geographical Information Systems Chair:Prof.Dr.Ümit Işıkdağ
	Digital Elevation Model Correction in Urban Areas Using Extreme Gradient Boosting Land Cover and Terrain Parameters <i>Chukwuma Okolie, Jon Mills, Adedayo Adeleke and Julian Smit</i>
	The Impact of Google's APIs on Landscape Virtual Representation <i>Fabio Bianconi, Marco Filippucci, Filippo Cornacchini and Andrea Migliosi</i>
	GIS Based Real Time Gas Leak Detection System at Baskent Natural Gas Distrubition Inc. <i>Selcuk Ozen and Dursun Zafer Seker</i>

14:30-15:30	Spatial Prediction of Received Signal Strength for Cellular Communication Using Support Vector Machine and K Nearest Neighbours Regression <i>Miray Perihanoglu and Himmet Karaman</i>
	Suitability Analysis for Urban Bicycle Tourism of Iloilo City using GIS <i>Dominic C. Fargas Jr., Aldwin D. Gregorio and Molly D. Endaya</i>
15:30-16:15	Online Session 3:Photogrammetry Applications-4 Chair:Assoc.Prof.Dr.Tolga Bakırman
	Geospatial Analysis and Optimization of UAV's Landing Site Selection from ALS Point Cloud <i>Dheerendra Pratap Singh and Manohar Yadav</i>
	Research on Construction of Natural Resources Three Dimensional Spatio Temporal Database System <i>Yin Gao, Jianjun Liu, Jianwei Liu, Yuanjie Zhang, Jian Che, Zhaokun Zhai, Bianli Zhao and Hao Li</i>
	Optimization of In Car Abandoned Children Detection Model via Deep Learning Approaches <i>Masayu Norman, Ainaa Ilyana Ahmad Shukri, Mohammad Hafiz Ismail, Zuraihan Mohamad, Fazly Amri Mohd, Ashnita Rahim and Helmi Zulhaidi Mohd Shafri</i>
16:15-16:30	Break
16:30-17:45	Online Session 4:Urban Information Management-2 Chair:Prof.Dr.Mehmet Rifat Akbulut
	HBIM and Extended Reality for Cultural Mediation of Historical Heritage:A Review <i>Nabil El Barhoumi and Rafika Hajji</i>
	Effect of Seasonal Variation on GNSS Zenith Tropospheric Delay <i>Nihal Tekin Ünlütürk and Uğur Doğan</i>
	Change Detection for Semi Automatic Update of 3D City Models <i>Abdelghani Tamort, Abderrazzaq Kharroubi, Rafika Hajji and Roland Billen</i>
	Detection and Recognition of Traffic Signs from Data Collected by the Mobile Mapping System <i>Hilal Gezgin and Reha Metin Alkan</i>
	A Reproducible Approach to Estimate Indoor Space Area on a Mobile LiDAR Dataset Using DBSCAN <i>Berk Anbaroglu and Hasan Berk Karabay</i>
17:45-18:00	Closing Ceremony