Call for Contributions

1. Inform the Chair
2. Submission URL:
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=GEOProcessing+2023+Special
Please select Track Preference as **GEOSA**
3. Note: *For 2022, all events will be held in a hybrid mode: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides). We hope for better times allowing us to return to the traditional on site scientific events. However, we are ready to adapt any which way the conditions dictate.*

Special track
GEOSA: Geospatial and Earth Observation Systems Applications

Chair

Dr. Rouhollah Nasirzadehdizaji, Water and Environment Department, Yüksel Proje Inc., Turkey
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along with

GEOProcessing 2023, The Fifteenth International Conference on Advanced Geographic Information Systems, Applications, and Services
https://www.iaria.org/conferences2023/GEOProcessing23.html
April 24-28, 2023 - Venice, Italy

Current implementations and improved applications of Geo-spatial, Earth Observation (EO), and remote sensing technologies have revolutionized the ability to assess and monitor geo-environmental threats such as landslides, land surface deformations, volcanic eruptions, coastal erosion, groundwater pollution, deforestation, flash floods, drought, etc., helping protect humans' lives and properties and assist emergency responders with damage assessments or evacuation planning during hazardous events.

Geographical Information Systems (GIS) address challenges in the collection, representation, processing, visualization, sharing, and management of geospatial data. Remotely Sensed (RS) images, such as optical (e.g., multispectral, hyperspectral), Synthesis Aperture Radar (SAR), or LiDAR, and information obtained from these data play an important role in addressing many different environmental problems around the world. On the other hand, the increasing application of advanced Machine Learning (ML), artificial intelligence (AI), and image analysis algorithms in the environmental field and their application to geoenvironmental threats provides an in-depth understanding of geoenvironmental hazards. Hence, geo-environmental threat assessments through earth observation, artificial intelligence, and geospatial technologies provide a source of information for various geo-environmental hazards and the sustainable management of these environmental issues with suitable mitigation systems.

Considering all the above-mentioned applications and opportunities, this Special Track invites researchers from both academia and the industry to contribute their research findings for solving a range of existing challenges, addressing new application scenarios and identifying opportunities in the remote sensing and GIS domain, developing new computational strategies, machine learning and artificial intelligence methods or by demonstrating the application of the existing methods.

Topics include, but not limited to

- Anything from classical image processing and the computer vision problems related to the remote sensing domain, to more recent and advanced topics such as satellite image time-series analysis and multimodal data

fusion for joint decision making (e.g., multispectral, hyperspectral and SAR images, LiDAR data, or Polarimetric SAR (PolSAR) and Interferometric SAR (InSAR) methods), geospatial data acquisition and processing, geo-Urban analysis by combination of GIS, 3D modeling and visualization, GIS and web-based GIS applications, dynamical geo-spatial mapping, precise environmental monitoring, integrated urban resource management, sustainable management practices, hydraulic and hydrological modelling,

- Integration of Artificial Intelligence (AI) for flood vulnerability assessment, remote sensing in climate change studies, decision support systems, spatio-temporal database management, deep learning for urban and environment planning, big data in geo-spatial information science, challenges and trends of geo-spatial information science, AI-enabled geo-spatial and earth observation present and future applications.

- The topics are not limited to the ones mentioned above and can include different subjects, especially AI strategies and their deployment in the field of remote sensing and geographic information systems, or the analysis of the time series of remotely sensed data or hyperspectral satellite imagery data processing for applications such as the tracking and monitoring of natural disasters or human-induced hazards.

Contribution Types
- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Important Datelines
Inform the Chairs: As soon as you decide to contribute
       Submission: March 9 (earlier, better)
       Notification: March 27
       Registration: April 6
       Camera-ready: April 6
Note: The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.

Paper Format
- See: http://www.iaria.org/format.html
- Before submission, please check and comply with the editorial rules:
http://www.iaria.org/editorialrules.html

Publications
- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: http://www.thinkmind.org

Paper Submission
https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=GEOProcessing+2023+Special
Please select Track Preference as **GEOSA**

Registration
- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

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