

The *ITU Journal on Future and Evolving Technologies (ITU J-FET)* is an international journal providing complete coverage of all communications and networking paradigms, free of charge for both readers and authors. The ITU Journal considers yet-to-be-published papers addressing fundamental and applied research. It shares new techniques and concepts, analyses and tutorials, as well as learning from experiments and physical and simulated testbeds. It also discusses the implications of the latest research results for policy and regulation, legal frameworks, the economy and society. This publication builds bridges between disciplines, connects theory with application, and stimulates international dialogue. Its interdisciplinary approach reflects ITU's comprehensive field of interest and explores the convergence of ICT with other disciplines. The ITU Journal welcomes submissions at any time, and on any topic within its scope.



Special issue on

## Geospatial AI to advance the United Nations Sustainable Development Goals

### Call for papers

The rapid advancement of Artificial Intelligence (AI), and Machine Learning (ML) techniques, combined with the surge in geospatial data availability and massive computational power, has unveiled new avenues for addressing real-world challenges from a spatial perspective. Recognizing the transformative potential of this synergy, the ITU launched the GeoAI Discovery (<https://aiforgood.itu.int/eventcat/discovery-geoai/>) webinar series and the GeoAI Challenge (<https://aiforgood.itu.int/about-ai-for-good/geoai-challenge/>) in 2022. Now in its second year this challenge stands as a beacon, motivating intellects globally to collaboratively tackle geospatial problems by leveraging the progress of AI/ML, with the ultimate vision of furthering the United Nations Sustainable Development Goals (SDGs) development.

Building on the ongoing discussions on Geospatial AI (GeoAI) in the ITU Discovery track and the achievements of the GeoAI Challenge's second edition, this special issue aspires to spotlight and amplify the groundbreaking approaches and insights from the challenge. We invite GeoAI Challenge participants and experts from the broad GeoAI community to share their novel solutions, techniques, and visions.



## Suggested topics (but not limited to):

<b>Applications and case studies</b>	<ul style="list-style-type: none"><li>• Application AI/ML to geospatial technologies</li><li>• In-depth case studies illustrating the application of AI/ML/Deep Learning (DL) in geospatial problems</li><li>• Experiences, learnings, and perspectives from the GeoAI Challenge 2023</li></ul>
<b>Methodologies and techniques</b>	<ul style="list-style-type: none"><li>• Advances of AI/ML in Earth observation</li><li>• Novel GeoAI algorithms</li><li>• Cutting-edge GeoAI methodologies and techniques to champion SDGs</li><li>• Geospatial foundation models</li><li>• Geospatial generative AI</li></ul>
<b>Education and society</b>	<ul style="list-style-type: none"><li>• Ethical, societal, and policy ramifications of GeoAI dedicated to sustainable evolution</li><li>• GeoAI and education</li></ul>

### Keywords

Artificial Intelligence (AI), geospatial, Machine Learning (ML), Sustainable Development Goals (SDGs), Geospatial Artificial Intelligence (GeoAI), geospatial foundation models, geospatial generative AI

### Deadlines extended

Paper submission: **30 June 2024**

Paper acceptance notification: 30 September 2024

Camera-ready paper submission: 30 November 2024

### Submission guidelines

This special issue calls for original scientific papers. Submissions should emphasize the novelty or uniqueness of the solution, ensuring they contribute fresh perspectives or insights to the field.

All submissions will be subjected to a stringent peer-review process, upholding the quality and pertinence of accepted narratives. Submitted papers should not be under consideration for publication elsewhere. Submissions must be made electronically using ScholarOne Manuscripts at: <https://mc04.manuscriptcentral.com/itujournal>, where templates and guidelines are also available.

### Publication

Papers will be published in the ITU digital library.

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Inquiries should be addressed to Alessia Magliarditi at: [journal@itu.int](mailto:journal@itu.int).

