



## Land Use Classification with GIS and Remote Sensing Data Based on AI Technology

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### Message from the Guest Editors

We have seen recent progress and applications of deep learning to extract complex contextual information from remote sensing data to understand socio-economic characteristics such as poverty which demonstrates the feasibility of using AI and remote sensing to better characterize Land Use and its change. This special issue welcomes papers that explore the various topics on the applications of AI to characterize Land Use and its change.

- Novel Deep learning-based approach or AI for land use classification
- AI-based Land Use Change prediction models and their applications
- Quantification of biases in AI algorithms for Land Use classification
- Quantification of errors and uncertainties in AI for land use classification and their drivers and implications
- Innovative application of AI-based satellite image classification in humanitarian, developmental, and environmental sectors
- ‘White boxing’ AI for land use classification
- Challenges and limitations of operational implementations of AI for land use classification
- Privacy and ethical aspects from AI research on remote sensing and land use

