

## *Sensors and Materials*

# **AI-based Geospatial Analysis of Geosensor Data for Disaster Management**

## **Call for Papers**

For this Special Issue, we are collecting original research contributions focused on the methods and applications of AI-based geospatial analysis of geosensor data for disasters, including monitoring, prediction, loss assessment, decision-making, emergency responses, and emergency planning, to improve rescue and the protection of lives and property.

Geosensors include multiple “bornes” (e.g., airborne, aerial-borne, and ground-based geosensors) and multiple models [e.g., models that collect optical images, radar images, near-infrared (NIR) images, and light detection and ranging (LiDAR) cloud points], as well as the Global Navigation Satellite System (GNSS), mobile location sensors, and in situ location sensors.

Rapid emergency responses and disaster management are important after a natural disaster, such as a hurricane, wildfire, flood, earthquake, typhoon, or landslide. These include disaster mapping, loss assessment, emergency decision-making, emergency responses, and emergency planning.

The past few decades have witnessed significant loss of life and property in natural disasters. Moreover, global climate change and the growing world population pose new challenges for disaster management. The recent developments in the geospatial analysis of data obtained from geosensors by artificial intelligence (AI) can provide new opportunities for disaster researchers and practitioners to improve public safety in disasters. For this Special Issue, we encourage authors to submit their original work on AI and geospatial technology applications for disaster management. Potential topics include but are not limited to the following:

Scope:

- Fusion methods for multiple geosensors for AI-based disaster prediction and management.
- New AI-based geospatial methods/tools for disaster monitoring/tracking/mapping.
- New AI-based geospatial technology applications in loss assessment (e.g., building/road damage, economic loss).
- New methods/tools/systems employing AI-based geospatial technologies for emergency decision-making.
- Novel applications of AI-based geospatial technologies in emergency responses (e.g., emergency warning, evacuation, emergency rescue).
- New applications of AI-based geospatial technologies in emergency planning (e.g., evacuation planning, rescue planning).

Submission due date: Jul 31, 2022

Publication date (planned): Oct 31, 2022

Journal website: <http://myukk.org/>

Guest Editors:

Associate Professor, Zhonghua Hong, Ph.D.

College of Information Technology, Shanghai Ocean University

Shanghai, China

zhong@shou.edu.cn

Interests: Photogrammetry, planetary mapping, emergency mapping, deep learning, and GNSS-R

Assistant Professor, Dapeng Li, Ph.D.

Department of Geography & Geospatial Sciences, South Dakota State University

Brookings, SD, USA

Dapeng.Li@sdstate.edu

Interests: GIS and its applications in hazards, public health, transportation, and sustainability

Submit to:

Online Manuscript Submission System (<https://myukk-org.ssl-xserver.jp/form/>) or

Email to MYU K.K. (myukk@myu-inc.jp)

(Attention)

As stated in Instructions to Authors in the Guidelines, the author(s) will be obliged to pay the publication fee upon the acceptance of the manuscript for publication (for example, JPY 99360 for 10 pages in Sensors and Materials format). If the quality of the English of your manuscript does not satisfy the journal standards, the authors will bear the proofreading fee (JPY 10000–30000), which will be charged with the publication fee.

If you have any questions, please feel free to contact the editorial staff at the address below.

Editorial Department of Sensors and Materials

MYU K.K.

1-23-3-303 Sendagi, Bunkyo-ku, Tokyo 113-0022, Japan

Tel: +81-3-3827-8549, Fax: +81-3-3827-8547

E-mail: myukk@myu-inc.jp

