

ASEAN Regional Training Course on Geospatial Big Data Applications for Sustainable Development

Satellite Analysis and Applied Research

Deadline: Closed

| | |
|---------------------------|---|
| Type: | Course |
| Location: | Sri Racha, Thailand |
| Date: | 5 Aug 2019 to 9 Aug 2019 |
| Duration of event: | 5 Days |
| Programme Area: | Satellite Imagery and Analysis |
| Specific Target Audience: | No |
| Website: | http://artsa.gistda.or.th/geobigdata2019/ |
| Price: | No Fee |

×

Fee reductions or waivers

In accordance with its financial assistance policy, UNITAR issues a limited number of fee reductions or waivers to participants from low and middle income countries, with priority assigned to participants from least developed countries. Unfortunately, UNITAR may not be able to respond favorably to all requests, however. Participants working in the United Nations, regional or other international organizations, regardless of nationality, are not eligible for fee reductions or waivers.

Close

Event Focal Point Email: Khaled.MASHFIQ@unitar.org

Event Focal Point Contact Number: +66970705376

BACKGROUND

The volume of data in the world is increasing exponentially. By some estimates, 90% of the data currently existing worldwide has been created in the last two years, and it is projected to increase by 40% annually[1]. The data revolution encompassing the application of earth observation data, the open data movement, the rise of crowdsourcing, new information and communication technologies (ICTs) for data collection, and the explosion in the availability of big data, together with the emergence of artificial intelligence and the Internet of Things -- is already transforming society. Multi-temporal earth observation data and crowdsourced geospatial data can help us identify depleting natural resources, diagnose underlying causes and can help us devise informed planning for sustainable development. According to the UN global pulse to use big data for development we need to turn imperfect, complex, often unstructured data into actionable information. Often the tools and technologies for analysing massive amounts

of data are rapidly evolving and no single standard exists for generating actionable information. This poses a huge challenge to the practitioners and decision maker for effectively utilizing geospatial big-data for decision making.

As expressed in its Vision 2025, ASEAN highlights the need to promote and ensure balanced social and sustainable environment that meets the needs of the peoples at all times and to work towards a resilient community with enhanced capacity and capability to adapt and respond to social and economic vulnerabilities, disasters, climate change as well as emerging threats and challenges. The Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018–2030), which was adopted by ESCAP in 2018, is a regionally-coordinated, inclusive and country-needs driven blueprint that harnesses space and geospatial applications, as well as digital innovations to support ASEAN members and other countries in the region, particularly those with special needs, to address regional challenges towards achievement of the Sustainable Development Goals.

[1] <https://www.un.org/en/sections/issues-depth/big-data-sustainable-development/index.html>

EVENT OBJECTIVES

UNITAR-UNOSAT, GISTDA, ARTSA, and UNESCAP is offering an introductory course in the use of Geo-Spatial Information Technology applications for big data relevant to different domains such as disaster risk management, environmental monitoring, hazard mapping and disaster risk reduction for achieving Sustainable Development Goals (SDGs).

LEARNING OBJECTIVES

At the end of the course, participants should be able to:

- Define and describe basic concepts and terminology related to Geospatial Big Data Analytics
- Explain the advantages and limitations of using Geospatial Big Data Analytics
- Detect flood using RADAR satellite image and damage estimation using Google Earth Engine
- Monitor disaster situation using webscraped geodata
- Utilise big data techniques for monitoring carbon emission, smog and forest fire using Google Earth Engine
- Undertake the process to prepare actionable information through visual communication

CONTENT AND STRUCTURE

The course will provide participants with a theoretical understanding of geospatial big data and within the context of geospatial data analysis, its application for problem identification, assessment, and decision support. Participants will also be challenged to solve a problem of their choice by developing a simple decision support application.

METHODOLOGY

This is a full-time, face-to-face course with lectures and lab exercises using geospatial big datasets and real case scenarios (60% lab exercises, 40% lectures and discussions). This course is divided into 5 modules. Each module is structured into 4 sessions of 1.5 hour each. The average workload per week is likely to be around 25-30 hours.

The course is designed in a way to have a balanced approach between theoretical and practical teaching methods consisting in Power Point presentations, live demos, videos, interactive sessions and geospatial big data analytic exercises. At the end of the course, GISTDA, ARTSA, UNOSAT and UNESCAP will set up a community of practice platform to maximize the learning experience of participants and to provide all required technical backstopping and assistance to training participants during and after the training.

TARGETED AUDIENCE

Expected Participants from ASEAN countries

The course is designed to accommodate ASEAN participants, who work in government sector as a public officer, from geoinformatics backgrounds and professional experiences. Previous experience in basic programming and algorithm development is recommended. Participation is limited to a maximum of 20 participants.

There are two groups of participants, self support participants and funded participants, available for this course. Both groups are supported with local expenses by local host (ARTSA and GISTDA, Thailand) excluded the life and health insurance.

UNESCAP and UNOSAT-UNITAR also offering the airfare grant for limited number of funded participants on competitive bases. A panel of judges from the local organiser and co-organiser in its sole discretion will review all application and decide on the fund recipient. The applicant for funded participant must be a government officer in ASEAN country or official of ASEAN agencies.

ADDITIONAL INFORMATION

How to Apply

Sending invitation letter and attendance forms to all selected participants (for VISA purpose)

All applicants are requested to submit the application through ONLINE APPLICATION FORM with required documents as below detail list.

- (1) Online Application form can be accessed at <http://artsa.gistda.or.th/geobigdata2019>
- (2) One Copy of Passport*
- (3) Curriculum vitae (Maximum 2 pages)*
- (4) One letter of recommendation: e.g. from your supervisor, head of the department or head of organization who knows well your work (the recommendation form is available on training course website).

* Note: (2) and (3) should be prepared in PDF format and should be attached in the online application form

Important Dates

| | |
|--|------------------|
| Call for course application | 01 June 2019 |
| Course application deadline | 30 June 2019 |
| Announcement of selected participants | 5 July 2019 |
| Sending invitation letter and attendance forms to all selected participants (for VISA purpose) | 5 - 10 July 2019 |
| Deadline for attendance form submission | 20 July 2019 |
| Travel to SKP, Thailand | 4 Aug 2019 |
| Geospatial Big Data Course | 5 - 9 Aug 2019 |