

Instructors

Associate Prof. Dr. Maged Marghany

Associate Prof. Dr. Maged Marghany (1967) holds his MSc. in Physical Oceanography from University Pertanian Malaysia and a Ph.D in Environmental Remote Sensing from University Putra Malaysia. He was conferred the best speaker award from the Japanese Society of Remote Sensing due to his outstanding presentation at the Asian Conference of Remote Sensing 1998 held at the Terades Hotel in Manila, Philippines. He was awarded the ESA Post-doctoral Fellowship by the International Institute of Aerospace and Earth Observation (ITC) in Enschede, the Netherlands, funded by the European Space Agency (ESA) for one year from March 2000 to March 2001. From July 2001 till July 2005, Dr. Maged became a senior lecturer at Kolej Universiti Sains Dan Teknologi Malaysia (KUSTEM). Dr. Maged joined Universiti Teknologi Malaysia (UTM) as a senior lecturer in July 2005, and was promoted to Associate Professor in December 2009. In 2015 till 2017, Dr. Maged served as a researcher to University Putra Malaysia. During this period he led several projects on applications of SAR to Malaysian coastal waters, funded by Ministry of Science, Technology and Innovation, Malaysia (MOSTI). Dr. Maged is now appointed as a Research Fellow in Universiti Sains Malaysia

Professor Ruslan Rainis

Prof. Ruslan received his Masters and Ph.D in City & Regional Planning from Ohio State University. A Geographical Information Scientist serving Universiti Sains Malaysia with over 25 years of experience in research, teaching, and consultancy in various topics related to GIS. Prof. Ruslan specializes in geographical information systems, business geography, local business marketing, internet marketing, spatial demography, urban planning, spatial humanities and social sciences, as well as remote sensing. He is also a local business marketing consultant providing local business marketing, mobile marketing, social media and internet marketing services to local/small businesses in cost reduction, increasing customer volume and profit volume.

Dr. Tan Mou Leong

Dr. Tan Mou Leong received his Ph.D. (remote sensing) from Universiti Teknologi Malaysia in 2016. After Ph.D. graduation, he continued as a postdoctoral research fellow at National University of Singapore. He is currently working as a senior lecturer of climatology and hydrology sciences in the Geography section, Universiti Sains Malaysia. He has 5 years of experience in hydrological modelling, and has an interest specifically on understanding the anthropogenic and climatic effects on regional hydrological cycle. Dr. Tan is also inquisitive to the evaluation of satellite products reliability in climate and hydrology applications in Malaysia. He has published more than 10 articles in high-impact journals. He was awarded the best postgraduate student during his Ph.D. convocation. He is serving as a guest editor for a special issue of "Hydrological modelling and remote sensing: selected papers from the 2017 and 2018 SWAT International Conferences" in the Water journal.

Who should attend

This workshop welcomes all government officials, local authorities, JUPEM, MacGDI, private sector individuals involving directly in planning, and those interested in this field and works with spatial and related data.

Participation

Workshop duration: 2 days

Mode of delivery: Lectures and hands-on training related to subject by instructor(s)

Language

English

Malay (if necessary)

Fees

The fee for EACH workshop/ training course is RM700.00 (Ringgit Malaysia Seven Hundred only) It is inclusive of 3 meals (breakfast, lunch and tea break) and stationary for the particular workshop/training course.

Important

Please bring along your own laptop for this workshop.

Enquiries

Kindly contact:

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GIS & Remote Sensing Workshop @USM KL

"A GIS for all Training Series"



Organized by:

Geography Section,
School of Humanities,
Universiti Sains Malaysia
Pulau Pinang, MALAYSIA

Workshop 1: Introduction to GIS using Open Source Software

1-2 August 2018

Introduction

Most activities in the world today have a spatial component, since everything happens somewhere. Knowing the locations of these activities, we can relate them with other spatial phenomena. This course provides a general introduction of geographic information systems (GIS), which will help to identify potential applications of GIS in the local authority. Such application may range from daily administrative activities to strategic planning. Therefore, the main goal of this workshop, therefore, is to assist in understanding the principles of GIS and their potential applications especially in the context of local authority.

At present, the application of GIS is often hindered by the cost of commercial software available in the market. Availability of public domain GIS software (open-source software) opens avenue for more users to start implementing GIS to assist in decision making. Q-GIS, for example, is an open-source GIS software that has wide range of capabilities, which could be available to all. Thus, the training will focus on Q-GIS as an introduction to all.

The workshop discusses basic skills on input, database management and display of geographically-related data that comes from various sources and time period. This course assumes that participants have very little or no prior experience with theoretical knowledge or the operation of a GIS program. When the participants complete the course, they will be able to understand basic concept of GIS and how to use it via Q-GIS.

Objectives

- To introduce participants on GIS concept and data.
- To provide practical skills of data input, management and display using Q-GIS.

Benefits of the course:

1. Excellent training for physical theories behind Geographic Information System (GIS) application.
2. Improve a skill in spatial mapping and analyzing
3. Learn how to obtain a free open-source GIS software.

Workshop 2: Introduction to Remote Sensing Using Open Source Software

15 – 16 August 2018

Introduction:

Remote sensing is widely used for the analysis of environmental phenomena. Remote sensing techniques are widely applicable in many disciplines and coupled with GIS, these techniques are now a prized industry. In this workshop, open-source methods are implemented along with freely-available remote sensing imagery. Therefore, there are no prerequisites and no previous remote sensing experience is required from participants.

Objectives:

The main aim is to establish a wide platform in dealing with different remote sensing satellite data using available open-source software.

Contents:

The workshop will present an overview of several theoretical physics as foundation before the applications of satellite remote sensing techniques. It will also provide basic introduction to open-source software with its plug-ins and how they can be utilized effectively in remote sensing image processing. Participants will learn how to download the software, where to find help and various online resources for various satellite data. Specific examples of the use of the software and online resources for different applications will be provided in this workshop. Hands-on activities will focus on learning basic use and capabilities of open-source software for displays, analysis, printing and sharing of satellite remote sensing data. A brief introduction will be given on how these technologies come together, and it can be utilized.

Benefits of the course:

Throughout the workshop, participants will gain:

1. Excellent training for theoretical physics of remote sensing technology
2. Improve a skill in image processing
3. Learn how to solve a remote sensing technical problems.
4. Learn how to obtain a free open-source remote sensing software.

Workshop 3: Remote Sensing for Sustainable Development

29-30 August 2018

Introduction

Sustainable development (SD) is defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” in the Our Common Future Report. Remote sensing technology, in conjunction with ground-based observations, plays an important role to observe, monitor, measure and model both natural and human ecosystems. With the rapid development of image processing technique and sensor technology, remote sensing has become an essential tool for understanding and monitoring the Earth. In addition, it is also important to manage the natural and man-made disasters in order to reduce negative impacts to our ecosystems. This course explores the latest remote sensing applications in multiple SD aspects. In this course, participants will learn the basics of the remote sensing in SD, during 2-day modules:

Objectives

- To describe the role of remote sensing in Sustainable Development Goals (SDGs).
- To demonstrate some real applications of remote sensing in SD.
- To introduce some open-domain satellite products that could be used in SD applications.

Benefits of the course

This course could be an initial exploration for those who like to apply remote sensing in their work. This course consists of several hands-on exercises:

- Web-tools for latest satellite data search, analysis, visualization and download.
- Participants will be able to search and download near-real time satellite data in their interested region.
- The applications of Google Earth in Sustainable Development.
- Participants will be able to use the basic features and tools of Google Earth to device a project of specific area.
- Participants will be able to develop a more informed understanding of their interested location via the interpretations of satellite images in Google Earth.