



## Pre-Conference Workshop

### Developing Search Applications Using Open Source Enterprise Search Platform

**Venue:**

Open University Malaysia (OUM)  
Block B, Zon C, Jalan Tun Ismail  
50480 Kuala Lumpur, MALAYSIA

**Dates:** 25-26 November 2016

#### Who Should Participate?

- Young techies
- IT Professionals
- IT Lecturers
- Anyone interested in search applications

***Important Note:***

The workshop is **limited to 25 persons** only based on first-come, first-served basis.

#### At the end of the workshop, you should be able to:

1. Explain the concept of search engine
2. Use Apache Solr – an open source enterprise search engine platform to develop customised search applications

#### Workshop Prerequisite

This workshop assumes basic knowledge of Java and standard database technology. No prior knowledge of Solr or search engine is required.

## Workshop Overview

With fast-growing technologies such as social media, cloud computing, mobile applications, and big data (small data as well), information has become an important commodity. One of the main challenges is handling the massive volume of data consumed and produced by a huge, global user base. In addition, users expect online applications to always be available and responsive. Whether you're handling big (or small) data, managing documents or building a website, it is important to be able to quickly **search** through your content and discover meaning in it.

This workshop is specifically designed to focus on the basic and some intermediate concepts of Apache Solr. Apache Solr is a ready-to deploy, Java-based, open source, enterprise-based full-text search engine. Solr is now used in more places – from integrated library systems to e-commerce platforms, analytics and business intelligence products, content-management systems, internet searches and more. Some notable users of Solr are AT&T, Instagram, Buy.com, Disney, Adobe, eBay, SAP Hybris, IBM Websphere Commerce and Bloomberg.

As you can see, a number of issues exist that make a seemingly basic feature of search application hard to implement without a specialised approach. But with a search engine like Solr, these features come out of the box and are easy to implement.

The workshop will provide balanced conceptual discussion with practical examples to show how Solr-based search engines are implemented. Your workshop facilitator, Assoc Prof Dr Nantha Kumar Subramaniam, has successfully used Apache Solr to develop a search tool known as Seach&Learn for learning.

**Facilitator:** **Assoc Prof Dr Nantha Kumar Subramaniam**

*Head*

Institute for Learning Technology  
Open University Malaysia (OUM)

## Workshop Schedule

TIME	Getting Started with Apache Solr
	<i>Day 1 – 25 November 2016 (Friday)</i>
8.30am – 9.00am	Registration
9.00am – 9.30am	Ice-breaking
9.30am – 9.45am	Objective and expected outcome of the workshop Learning outcomes of Day 1
9.45am – 10.00am	Overview of search engine architecture

TIME	Getting Started with Apache Solr
	<i>Day 1 – 25 November 2016 (Friday)</i>
10.00am – 10.15am	<i>Morning Tea Break</i>
10.15am – 11.00am	Introduction to Apache Solr
11.00am – 11.30am	Setting-up Apache Solr server
11.30am – 1.00pm	Text Indexing and Analysis in Apache Solr
1.00pm – 2.00pm	<i>Lunch</i>
2.00pm – 3.00pm	Relevancy and scoring algorithms in Apache Solr
3.00pm-3.15pm	<i>Afternoon Tea Break</i>
3.15pm – 3.45pm	Auto-suggest feature in Apache Solr
3.45pm – 4.00pm	Case Study: Search&Learn tool

TIME	Hands-on Session
	<i>Day 2 – 26 November 2016 (Saturday)</i>
Hands-on Session 1 9.00am – 10.00am	<ul style="list-style-type: none"> <li>• Starting the server</li> <li>• Writing the indexing document</li> <li>• Creating the configuration files</li> <li>• Running the query</li> <li>• Exploring the administrator tool</li> </ul>
10.00am – 10.15am	<i>Morning Tea Break</i>
Hands-on Session 2 10.15am – 1.00pm	Hands-on session: <i>Continued</i>
1.00pm – 2.00pm	<i>Lunch</i>
Hands-on Session 3 2.00pm – 3.00pm	Hands-on session: <i>Continued</i>
3.00pm – 3.15pm	<i>Afternoon Tea Break</i>
3.15pm – 4.00pm	Creating the client application