



Arab Republic of Egypt
Ministry of Communications
and Information Technology

Title: AMECSE 2014Tutorials

A series of tutorials will be held as part of AMECSE 2014 to develop skills in and advance awareness of software engineering practice. All tutorials will be half-day (3-4 hours) and will be conducted in parallel during the second day of the conference, Wednesday 22 October, 2014:

T01: Agile Software Requirements Specification for Successful Software Development - Kassem Saleh, Professor of Information Sciences, Kuwait University

Overview: This tutorial will provide an overview of both the theoretical and practical backgrounds needed for the agile development of software requirements specifications.

T02: Safety-Critical software systems, What is special ? - Hossam Yahia Moawid, Software Safety Expert, Valeo

Overview: This tutorial will provide an overview of automotive safety needs and industry constraints as well as safety within the product development life cycle. The tutorial will discuss what is special about Safety-Critical software explaining the commonalities / non-commonalities between automotive and aviation domains.

T03: Service Oriented Architecture: Practical Approach for Small and Enterprise Systems - Mustafa Gamal, R&D Consultant, SECC – ITIDA

Overview: Software Oriented Architecture (SOA) is a powerful architecture pattern that enables modifiability, testability, and reusability. On the other hand SOA is joined with a heavy stack of technologies, which lead to be thought as an architecture pattern suitable only for Large Enterprise systems. This tutorial provides a simple and practical way to adapt SOA in small systems to get its benefits without the technology stack overhead.

T04: IEEE SWEBOK 2014 (Software Engineering Book of Knowledge) - Maged Koshty, Managing Director, ExpertWave

Overview: SWEBOK V3.0 is the most recent completely revised and updated version of the internationally respected Guide to the Software Engineering Body of Knowledge from IEEE Computer Society published in 2014. In this tutorial, major changes in 15 Knowledge Areas that has been reflected in the SWEBOK will be highlighted, presenting different usage of the guide in major educational institutions worldwide.

T05: Test-Driven Development for Skeptics - Ameer Gaafar, Quality Expert, SECC-ITIDA

Overview: In this tutorial, attendees will be introduced to TDD, how and why it works, and will provide tips on how to adopt it safely in various environment. Attendees will also watch or get to try an actual TDD session and see how the approach provides a hospitable and safe environment for innovation and creativity.

T06: Refactoring Legacy Code - Amr Noaman, Agile Trainer & Consultant, Agile Academy

Overview: In this tutorial, participants will be presented to a simple, sustainable, and stepwise roadmap which tackles these challenges. This approach divides the effort to refactor legacy code into three stages: (1) Quick-wins; simple and least risky enhancements (2) Divide-and-conquer the code into functional, utility, and architectural components, with identified and clear component interfaces. (3) Inject-quality-in the code by wrapping components with automated tests

T07: ScrumMaster Role and Responsibilities in Agile Environment - Ahmed Hammad, Quality Expert, SECC-ITIDA

Overview: This tutorial starts with a brief review to Scrum, then explains in detail ScrumMaster focus and responsibilities. It covers also the required qualifications and skills to fill his role competently.

T08: Agile Software Development Practices - Ibrahim El-Etr, Program Management, Orange Labs and Mohamed Ragab, Head of Technology & Agile Development Coach, Orange Labs

Overview: Software development is considered young compared to other established industries. Many challenges face software development teams, resulting to low success rate. Misguided use of practices drawn from other fields caused more harm than good. Over the past 2 decades a set of software development methodologies have evolved and proved success in the field. This tutorial provides a decent introduction to the landscape of Agile development methodologies.