



Join the Thought Leaders Take Advantage of the ASWEC Tutorial Program

Including renowned international speakers on hot topics such as SOA and Web services, agile methods, UML and MDA, intellectual property and testing automation.

April 18th 2006

Register at www.aswec.org

9-12.30	13.30-17.00
#1 Test Automation Architectures	#1 Test Automation Architectures
#2 Producing and using MDA Computation-Independent Models	#5 Practical MDA with Visual Studio 2005 and Sparx Enterprise Architect
#3 Intellectual Property and Computer Software	#6 eXecutable/Translatable UML
#4 Agile Methods	#7 Building Connected Systems using the SOA Approach
#8 Architecting and Developing Message-Oriented Web Services	



Tutorial One – Test Automation Architectures (Full Day Tutorial)

Dr Danny Powell **Consultant, K. J. Ross & Associates**

This full day tutorial will present a number of different test automation architectures and their respective advantages and disadvantages. The architectures presented will include: capture-playback, scripted, data-driven, action-word driven and model-based test frameworks. You will learn about writing, maintaining and managing tests using each of these architectures and we will discuss a process for the adoption of test automation architectures.

Tutorial Two – Producing & Using MDA Computation-Independent Models

Dr Alex Jouravlev **Principal Consultant, Business Abstraction Pty Ltd**

OMG's Model-Driven Architecture (MDA) promises greater flexibility and productivity in developing enterprise software solutions. A practical MDA framework is based on Computation-Independent Model (CIM), which is then translated into Platform-Independent Model (PIM) then further into Platform-Specific Model (PSM). Computation Independent Modelling is a new activity for developers, and critical for MDA success. The participants in the tutorial will learn to model at the Computation-Independent level and apply Solution Design processes and MDA transformations to produce more familiar Computation-Oriented Models.

Tutorial Three – Intellectual Property & Computer Software

Alistair Smith

Associate, Davies Collison Cave's Information Technology & Communications Patent Practice

The aim of the tutorial is to consider the extent to which computer software can be protected by way of Intellectual Property. We will look at the different types of Intellectual Property and the extent to which these can protect software related products. Particular attention will be paid to patent protection, including a discussion of the steps involved in obtaining protection, how patents should be interpreted and some of the issues involved in enforcing protection.

Tutorial Four – Agile Methods

John Sullivan, Professional Services Manager, ThoughtWorks Australia

Agile Methods have been used to build software that truly meets requirements, with faster completion times and higher quality. This tutorial guides people through Agile techniques from requirements through to development practices that help deliver software that is closer to what is really needed. Taking experiences and lessons learnt from five years of running and mentoring Agile development teams, John Sullivan will use real life examples to demonstrate that software can be built on-time, deliver real value and have low if not zero defect rates.



Tutorial Five – *Practical MDA with Visual Studio 2005 & Sparx Enterprise Architect*

Dr Alex Jouravlev **Principal Consultant, Business Abstraction Pty Ltd**

Model-Driven Architecture (MDA) generates a lot of interest in software development community, although is often seen as a risky move into new and untested technology. This tutorial shows how MDA frameworks can be implemented with Visual Studio 2005 and low-cost Enterprise Architect UML Modelling software. The resulting framework delivers better controlled high-performance programming and provides comprehensive documentation without a productivity penalty.

Tutorial Six – *eXecutable/translatable UML*

Dr Clive Boughton, Shane Flint, Faculty of Engineering & IT, ANU

eXecutable and Translatable UML (xtUML) is both a modeling language and approach to software development that has the potential to deliver productivity gains and high levels of reuse in environments of rapid technological change. This tutorial will introduce participants to xtUML and will show how it can be used to implement the OMG's Model Driven Architecture (MDA). The approach is based on maintaining a clear separation of concerns throughout the entire software lifecycle. The data and behaviour associated with each concern is modeled using the xtUML language, a well defined subset of UML. Because xtUML is an executable language, these models can be verified using interactive model execution environments before they are translated and woven together to form code, documentation and other software engineering artefacts. The tutorial will conclude with a discussion about the benefits and limitations experienced during industrial applications of xtUML.

Tutorial Seven – *Building Connected Systems using the Service Oriented Architecture Approach*

Martin Granell **Readify Senior Consultant & Solutions Architect**

Connected systems are pervasive as a result of economic drivers for companies to be more agile and to drive down corporate costs. Applications no longer live in single process or machine silos. Applications need to be designed to be a part of a connected network of services to build systems that span multiple machines and interoperate with different platforms. This tutorial discusses how a conceptualized view of the business drives service oriented analysis/design and provides you with the knowledge and techniques to realize such connected systems today. The presenter will be sharing his real world SOA analysis and design experience, and illustrating SOA implementation techniques using the Microsoft Visual Studio technology.

Tutorial Eight – *Architecting & Developing Message-Oriented Web Services*

Dr Jim Webber **SOA Practice Lead, ThoughtWorks Australia**
Dr Savas Parastatidis **Program Manager, Microsoft Corporation, USA**

Best practice in Web Services architecture and development has moved on since the days where the technology was used as a platform-agnostic RPC mechanism. This tutorial introduces the message-oriented aspects of common Web Services middleware and shows how to apply its features to building Web Services with interesting transport-neutral message exchange patterns and security requirements. The tutorial will be code-focussed and will take the audience through the design and implementation of a fully-featured Web Services application. The application will be used as a test bed to illustrate various aspects of WS-Security (via WS-Policy) to show how messages exchanges can be made robust against tampering, non-repudiable, and private.

Participate in any of these exclusive, full and half-day intensive tutorial sessions with Australia's leading software engineering subject matter experts.

Book early: Spaces are limited to ensure participants receive maximum benefit of presenters' time.

You can also register for the ASWEC conference to find out about the latest research on handling complexity in software engineering (www.aswec.org for details)