

SIGIST Spring 2012 Conference / 7 March 2012

Presentation Abstracts and Speaker Biographies

Lee Copeland, SQE & StickyMinds

“Advanced Test Case Design Using Pairwise Testing”

Many software systems are required to process huge combinations of input data, each of which deserves to be tested. Since we rarely have time to create and execute test cases for all these combinations, the fundamental problem in testing is how to choose a reasonably-sized subset that will find a large percentage of the defects but that can be performed within the limited time and budget available.

Pair-wise testing is the most effective test design technique to deal with this problem but, unfortunately, is not understood by many testers. The answer is not to attempt to test all the combinations for all the values for all the input variables but to test **all pairs** of variables. This significantly reduces the number of tests that must be created and run while still finding a large percentage of the defects. Lee shares examples of the effectiveness of pair-wise testing and demonstrates this technique through the use of Microsoft’s PICT tool. Learn to apply this technique through a comprehensive example.

Lee Copeland has over thirty years experience as an information systems professional. He has held a number of technical and managerial positions with commercial and non-profit organizations in the areas of applications development, software testing, and software development process improvement. As a consultant with Software Quality Engineering, Lee has developed and taught numerous training courses focusing on software development and testing based on his extensive experience. In addition, he provides consulting services to SQE’s clients.

Julian Harty, E-Bay

“Test Automation for mobile phone applications”

Mobile phones are ubiquitous and, since 2007, millions of us have changed our habits to use applications on our smartphones. We can find and download new applications immediately and even discard them a few minutes later. Some of us are involved in creating and testing these applications. This talk provides a primer on ways to test mobile phone applications, both interactively and using test automation. We will cover the full software lifecycle from creation to user-feedback for installed and web-based mobile applications.

The mobile apps world continues to evolve rapidly so join us to learn more about the testing challenges and practices for your mobile app world.

Julian Harty has been actively involved in testing mobile phone applications since 2006 when he joined Google as the first Test Engineer outside the USA and was handed several boxes of mobile phones and told he was now the mobile phone testing expert. Since then he’s written the first book on test automation for smartphone applications, published articles, given tutorials and classes globally on

the topic. He's also one of the editors, and the main author for the testing sections, for the popular Don't Panic Mobile Developers Guide to the Galaxy book, the 10th edition is being launched in February 2012. Much of his material is freely available online.

Roger Davidson, Microsoft

“Collaboration and efficient testing”

By drawing upon some examples of projects with our clients, we hope to provide some insight into the constraints of limited time or budget and how this can impact product quality. We will also demonstrate how advances in Application Lifecycle Management Tools and good practice can help mitigate technical and business risks created by these constraints. This session will discuss how developers and testers can collaborate more efficiently and why traditionally this had not happened during software development projects. Using a mixture of role play, demonstrations, discussion and slides we will walk through some elements of common scenarios seen in a typical IT department (if there is a such a thing) using the Microsoft toolset.

Roger Davidson has been around the IT industry for many years, during which time he has spent a good deal of time on solutions architecture for companies such as Sun, IBM, Novell and Microsoft.

John Young, Testing Solutions Group

“Agile Requirements Elaboration and Implementation in Sprints”

Can your team build a LEGO city in three sprints? This workshop will give participants experience of forming an agile team and working together to implement user stories and get them accepted by the product owner. The workshop will challenge the participant's ingenuity, requirements gathering, team working, estimation, communication, and LEGO construction skills. The team that delivers the most business value will win a prize.

John Young – John is a Principal Consultant at Testing Solutions Group. He has extensive experience in the development and delivery of training and skills transfer solutions in the disciplines associated with software testing and quality. As well as certification training, John also uses his experience as a tester to provide bespoke training and coaching in the practical, effective application of theoretical concepts in a workplace context. John works with clients using both traditional and agile software development methodologies.

His first experience of IT was as a business user who kept finding problems with the software and making suggestions about how things could be improved. One thing led to another and roles in test execution, test analysis, test and project management, quality management and process improvement and training roles followed in both public sector and private sector projects. John became increasingly more involved in developing and delivering training to facilitate process improvement.

John co-wrote the first Practitioner Course in Software Testing to be accredited by the Information Systems Examinations Board (ISEB). He has been an ISEB accredited tutor since 2000 and was a member of the ISEB Software Testing Examination Panel (2005 – 2009). John is a member of the team that put together the Certified Agile Tester (CAT) course and its associated assessment approach and

is one of the CAT Master Trainers. Since 2011 John has been delivering the CAT course in the UK and Europe.

In his spare time, John used to be a Karate instructor until he injured his back and took up ballroom dancing instead.

Paul Malcolm & Rachael Wettach, NHS Wales

“Creating a Software Application Development-Testing Framework for NHS Wales Informatics Service (NWIS)”

Effective, accurate project and test documentation may not be fashionable in development-led environments such as commercial software houses and web-only ventures, but for testers with wider and greater responsibilities it's still essential.

Every organisation can benefit from improving its documentation procedures, and testing as an industry could be transformed by creating greater commonality and standardisation of structure and content of the fundamental elements.

In 2010 Simpl created a software application development-testing framework for NHS Wales Informatics Service (NWIS). The testing framework refines and improves NWIS' previous application testing procedures and, for the first time, defines a consistent approach to in-house application testing across the whole organisation. It also provides clear testing guidance and sets expectations to external, third-party suppliers of applications. The framework enhances quality assurance procedures, reduces application development testing time and helps create applications that are right first time for doctors and nurses across Wales.

The framework promotes Risk-Based Testing (RBT). This is the first time RBT has been used at NWIS. It makes it easier for the NWIS Risk Team to review the testing of each project and ensure it meets with their requirements.

Simpl will share practical, working examples of the software test 'templates' and guidance they provide to clients in the UK healthcare sector - such as the NHS in Wales.

***Paul Malcolm** is EMEA regional director at healthcare IT adviser and integrator, Simpl. He is responsible for all operations of Simpl – from continuing to grow the UK business and supporting customers, to expanding into new EMEA territories and developing strategic partnerships and alliances. Paul holds a degree in Mechanical Engineering from the University of Hertfordshire.*

***Rachael Wettach** is an ISEN qualified Test Manager with ten years experience in test management. She has worked within Prince2 project environments and managed agile development test teams of up to 20 testers, including Functional and Non-Functional Testers, Engineers and Business Users.*

Allan Kelly, Independent Agile Software Development Consultant

“Objective Agility - what does it take to be an Agile company?”

Everyone wants to be Agile, or so it seems. But what does that mean? What does the Agile company do that others don't? There is more to being an Agile company than doing Scrum. In this talk Allan Kelly will consider what it means to be Agile and what you need to do to be an Agile company, rather than a company which just follows an Agile method. He will outline the three different ways we use the word "Agile" - Agile methods, Agile Toolkit and the state of Agile. In doing so he will discuss customers, project design, strategy and portfolio management and how these need to work together to achieve Agility.

Allan Kelly – Over 25 years Allan Kelly has held just about every job in the software world: system admin, tester, developer, architect, product manager and development manager.

Today he is based in London and works for Software Strategy Ltd. helping companies adopt and deepen Agile and Lean practices through training, consulting and coaching. He specialises in working with software product companies, aligning company strategy with products and processes.

In addition to numerous journal articles and conference presentations he is the author of “Changing Software Development: Learning to become Agile” (2008) and his new book, “Business Patterns for Software Developers” will be published in early 2012.

Lloyd Roden, Lloyd Roden Associates

“You can't sprint all the time...the importance of slack”

We are often told that we need to achieve more with less, or we need to become more efficient with the resources we have. Lloyd reveals a counterintuitive principle that explains why certain efficiency efforts can slow a company down and why Agile projects in particular can create "burnout" with staff members. Companies need to design workloads that allow people to think, innovate and reinvent themselves. By taking the risk of creating slack for team members it will not only allow changes to take place and foster creativity the surprising aspect is that the team's productivity will be increased. Creating slack will work for new and traditional companies and will provide a model for achieving and maintaining true efficiency and effectiveness.

Lloyd Roden – Lloyd is an internationally recognised consultant who has provided solutions, workshops and training for many different companies.

Richard Bishop, Intechnica

“How fast is the Cloud”

(Reserve Speaker)

How fast is the cloud? ... an investigation of cloud platform performance

When migrating applications to the cloud it is vital to ensure that you choose well matched applications and cloud platforms. This presentation describes Intechnica's experiences of testing an off-the-shelf eCommerce application on a variety of cloud platforms and sheds light on the importance of selecting the appropriate cloud infrastructure for your application.

***Richard Bishop** is an experienced IT consultant with over fourteen years of experience in a number of technical roles, including more than 10 years' experience as an application performance tester and test manager. He specialises in a number of technical disciplines including Microsoft server operating systems and HP testing tools (primarily LoadRunner and Performance Center).*

Richard takes an active role in the UK and worldwide testing community. As well as being co-leader of the UK HP Software user group, [VIVIT](#), he has been invited to sit on Vivit's Board of Directors to help develop Vivit services for members throughout Europe.
