



# What's INSIDE

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Manager's Workshop



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Classes & Tutorials



QUEST-at-a-Glance



**Keynote Presentations** 



Software Assurance Panel



Session Abstracts



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Site Floorplan

# Micro Focus Welcomes You to Quest 2011

I recently heard the CEO of a financial institution state "We are a software company, masquerading as a bank!" Business is built on software. Today, if we aren't building precisely what the users need, we're on the road to irrelevance. As technologists, we really have to hit the mark every time for our users. A recent statistic is that 32% of software projects are a success. Inexcusable -we have to fix this.

Welcome to the new quest for quality and project success. Our quest is a journey, with a mission to achieve 100% project success. I've seen too much mediocrity, i.e. acceptance of "good enough for now; just ship it..." Why settle? Let's view "good enough" as failing. Challenge your teams to fully satisfy all the needs of the users, on time and with excellent quality.

The most prominent characteristics of project failures are lack of collaboration and insufficient business relevance. As you listen to speakers at QUEST 2011, challenge them and ask: "What's different now in your concepts that will drive business relevance?" Look for ideas to drive competitive advantage and business agility. New solutions and a modernized approach are here. The quest for Continuous Quality Assurance is about being relevant to the business – join us for this journey. Learn at this great conference, and don't be one of those who settles for "good enough" anymore.

#### QUEST: A place to LEARN ...

Full-day Classes and Half-day Tutorials

– Build new skills in specific areas
through in-depth lectures and exercises
that enhance the learning experience.

Certification Preparation Classes – Prepare for professional certification by reviewing the Common Body of Knowledge for the quality and testing professions.

Keynote Speakers – Gain insight into effective strategies and industry trends impacting IT software quality and testing from industry and corporate leaders.

Industry Practices Sessions – Learn best practices and innovative approaches from the deep knowledge and diverse experience of IT quality and testing experts.

Exhibitor EXPO & Theatre – Learn about specific software quality

and testing tools and services in the marketplace through technical presentations, product demonstrations, and exhibitor booths.

One-on-One Expert Coaching – Meet individually with a conference speaker or the QAI professional staff for advice on your most pressing issues.

One-Stop-Shopping Bookstore – Browse the bookstore and purchase a book from leading experts in the IT quality and testing fields.

# QUEST: An opportunity to ASSESS...

Solutions Benchmarking Sessions – Compare your quality and testing practices against those of other companies and organizations as presented by peer managers and practitioners.



Pete DuPré
Chief Solutions Architect
Micro Focus
QUEST 2011 Magazine Sponsor

Certification Examinations – Assess your knowledge and skills by taking a certification practice examination.

#### QUEST: A setting to APPLY ideas...

Manager's Solutions Workshop – Develop strategies and solutions to common challenges facing quality and test managers through shared knowledge and lessons learned in an exclusive, interactive workshop for managers.

Workshop Sessions – Explore best practices through lecture and interactive group discussions and then learn how to apply the best practices in your own organization through hands-on exercises.

# QUEST: A chance to **CONNECT**...

Social Events – Connect with fellow conference attendees, speakers, and exhibitors during the manager's workshop dinner, welcome reception, attendee appreciation evening event, and the wine and cheese reception with exhibitors.



# **Seaport Hotel and Seaport World Trade Center**

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#### About the Hotel

The Seaport Boston Hotel & Seaport World Trade Center provides its guests with a refreshingly different style and service, whether visiting Boston for business or leisure. Located on the Boston waterfront in the bustling Seaport District, the Seaport Hotel offers luxury accommodations with dazzling city and harbor views and incredibly convenient access to all major points of interest including the Financial District, Freedom Trail, Faneuil Hall and the North End.

Enjoy complimentary wireless Internet access throughout the hotel plus one of Boston's finest fitness facilities including an indoor heated pool. Just minutes from Logan International Airport, the Seaport Boston Hotel & Seaport World Trade Center comes with its own MBTA and water taxi stops. A fresh new way to experience the historic city of Boston, Massachusetts, the Seaport facilities was also named one of the 'Best Places to Work' by the Boston Business Journal in 2010.

# **Featured Articles**

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# **Networking Events**

Manager's Connection Dinner Sponsored by *QAI Global Institute* Monday, April 4th

Welcome Reception Sponsored by *uTest* Tuesday, April 5th

Attendee Appreciation Evening Event Sponsored by *Microsoft* Wednesday, April 6th

**Exhibitors Wine and Cheese Reception and Raffles** Sponsored by *the EXPO Exhibitors* Thursday, April 7th



Attendee Appreciation Evening Event: Boston Harbor Cruise

# Welcome to your QUEST in Boston!



The QAI Global Institute's Quality Engineered Software and Testing Conference (QUEST) is a week of classes, tutorials, educational sessions, hands-on workshops, discussion groups, and networking events for quality and testing professionals from around the world. QUEST's unique learning opportunities address topics of the highest interest to practitioners in their quest to build today's skills and prepare for the quality and testing profession of the future.

### Why attend QUEST?

- » LEARN from industry thought leaders through attending sessions, participating in workshops and discussion group, and coaching sessions.
- » ASSESS your skill sets against QAI's Common Body of Knowledge by taking certification prep courses and practice examinations.
- » APPLY your experience and knowledge to produce solutions during classes, tutorials, and interactive work groups.
- » CONNECT with fellow practitioners, contribute to the industry, and explore the career possibilities. Enjoy four outstanding networking events.

### Classes & Tutorials (2 Days)

- 5 full-day skills based classes
- 10 half-day skills based tutorials

## Manager's Solutions Workshop (2 Days)

 2-day exclusive Manager's Solutions Workshop with experts leading solutions discussions

# Conference (3 Days)

- Keynote presentations by industry leaders
- 38 sessions by leading industry experts and corporate practitioners in concurrent conference tracks
- Expert panel discussion on Software Assurance addressing Software Security
- 13 workshop sessions
- 1-on-1 expert coaching sessions focused on individual needs
- Special interest group roundtable discussions
- 'Open Space' Solutions Forum
- Following QUEST on Twitter for information sharing

#### **Exhibitor EXPO and Theatre (2 Days)**

- 20 exhibits to browse
- Exhibitor products/services demonstrations in the exclusive EXPO Theatre
- One-stop-shopping bookstore

## **Certification Opportunities**

- Prep class for Certified Software Tester (CSTE)
- Prep class for Certified Software Quality Analyst (CSQA)
- Full practice tests for CSTE and CSQA

# Networking

- Hundreds of quality professionals to network with
- Manager's Solutions Workshop Connection Dinner
- Welcome reception
- Attendee Appreciation Evening Event
- Evening reception with exhibitors

### **Software Quality Topics**

- Agile Methods
- Application Lifecycle Mgt
- Cloud Computing
- Cost of Quality
- CMMI
- Data Quality
- Globalization
- Inspections
- Lean IT
- Measurement
- Organizational Change
- People/Teams
- Personal Wellness
- Process Improvement
- Quality Management
- Release Management
- Requirements
- Selling Quality
- Software Quality History
- Top Tech Trends

### **Testing Topics**

- Architecture Testing
- COTS Testing
- Estimation
- Exploratory Testing
- Mobile Apps Testing
- Offshoring/Outsourcing
- Performance Testing
- Regression Testing
- Risk-Based Testing
- SaaS Testing
- Security Testing
- SOA Testing
- Test Automation
- Test Data
- Test Design
- Test Management
- Test Planning
- Testing CoE
- Testing Value
- Virtualization



# **Participating Companies\***

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CAST QualiTest

Checkpoint Technologies Quality Perspectives

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Dept. of Homeland Security Seapine Software, Inc.

DragonFire, Inc. Software Engineering Institute

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EBG Consulting Siemens Industry, Inc.

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Google, Inc. SQS Group

Hewlett-Packard Syntel

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Micro Focus Wipro Technologies

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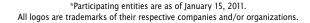






QUEST 2011 is supported by:







This 2-day Manager's Solutions Workshop will be held as an exclusive event for managers during QUEST 2011 in Boston.

The Manager's Solutions Workshop focuses on the top challenges facing managers in building, testing, and delivering quality software applications and products in today's fast-paced and demanding environment. This intense and interactive workshop provides a unique opportunity for managers to learn from the QAI professional staff and industry leaders. Managers will discuss issues with their peers from other companies to leverage group skills and knowledge in developing pragmatic solutions. Each attendee will have the opportunity to have their specific challenges and concerns addressed during the workshop.

An example of some of the challenges that have been addressed in past Manager's Solutions Workshops include:

- Proving the value of software quality and testing
- Budgeting for software changes
- Defining quality and testing metrics
- Improving the software testing process
- Building quality in throughout the software development process
- Making test automation work
- Establishing a testing center of excellence
- Estimating the testing effort
- Improving requirements

# **Why Attend**

QAI studies show that if an IT organization forms an internal committee to develop a solution to a current challenge, the cost to the organization can range from \$10,000 to \$50,000. In addition to the cost of time for internal resources, there are lost opportunity savings and other benefit deficiencies from the delay in implementing a solution.

By attending the Manager's Solutions Workshop you will:

- Get solutions to your specific work challenges
- Focus on strategic and future oriented issues
- Connect with peers who can be contacted in the future to discuss work challenges.
- Have the opportunity for one-on-one discussions with peers and leading experts.



Monday & Tuesday April 4 & 5

#### **Workshop Format**

The input to this workshop is the software quality challenges that the workshop's participants are facing, plus the input received from the companies and organizations affiliated with the QAI Global Institute. Prior to the Manager's Solutions Workshop, participants submit a list of their current challenges. These challenges are consolidated into a list of potential topics, which are ranked in order of importance to the workshop participants prior to the beginning of the workshop. The five to six top challenges then become the agenda for the workshop.

Each challenge is introduced to the workshop participants, who then break into small work groups. Using the QAI Global Institute's problem-solving approach, the work groups define the challenge and develop potential solutions based on their collective experiences and shared knowledge. Each group selects one of their potential solutions and defines "how to" tactics for the solution. Each group presents their proposed best solution which is critiqued by the workshop's leaders and quest industry experts. Additional time is spent by the quest industry experts to share their solutions and answer specific questions from the workshop participants while the expert is on the "hot seat." All workshop participants are given opportunities throughout the workshop to bring their specific challenge before the group as they sit on the "bar stool" to ask for friendly group advice. Participants will leave the workshop with a series of potential solutions to today's quality challenges.

### **Connections Dinner**

In addition to the two-day interactive workshop, participants will also have the opportunity to attend the Manager's Connection Dinner. This evening will provide the workshop attendees a chance to discuss the topics and related quality issues with the QAI faculty and subject matter experts in a more relaxed setting, and provides an ideal opportunity for networking with peers and exchanging ideas.

### Who Should Attend

This workshop is designed for managers responsible for building, testing, and delivering quality software applications within their companies or software products for the marketplace.

- CIOs and CTOs
- IT/IS Vice Presidents and Directors
- Quality Managers
- Quality Assurance Managers
- Testing Managers
- Project Managers

Don't miss this great opportunity to be part of a select group of managers and industry experts who will aggressively tackle today's most pressing quality issues!

The Manager's Solutions Workshop is an entirely independent function of the QUEST Conference. Prior registration is required to attend.

Manager's Solutions Workshop



# SQA at 50 - A Look Back

## By Steven R. Rakitin

Software Quality Consulting, Inc.

Software Quality Assurance (SQA) first appeared in the early 1960's. Amazingly, that's over 50 years ago. In this article, we'll take a look at the history of SQA and how it has changed over the past 50 years.

### In the Beginning...

In the 1950's, software development was in its infancy. Software for large programs procured by government agencies was always behind schedule and over budget. Sound familiar? Frequently, software did not work as intended and many programs were cancelled before anything was delivered.

The Atlas Missile Program was one of the first projects to address these problems. The program manager tried an experiment; he hired an independent software tester to "perform additional, unbiased testing of the software" (Nelson, 1979). In doing this, he hoped to get a timely and objective technical assessment of project status independent of the software development contractor.

The experiment worked so well that on subsequent programs, the role of independent software testers grew to focus on the entire software development life cycle (SDLC) and the role became known as Independent Verification & Validation (IV&V). Eventually, many companies saw the opportunity and offered IV&V services for large software development programs. These services often included activities such as SDLC reviews, requirements, design and code reviews, testing, simulation, and risk assessment.

#### The Birth of Software Engineering and SQA

In 1968, the NATO Science Committee sponsored a technical conference to discuss problems with the development of software. As a way to provoke interest and discussion, the conference organizers decided to use the term "software engineering" for the first time. Attending the conference were hardware manufacturers, users, software development companies, and academia. Most acknowledged there were many problems associated with producing large, complex software systems.

The conference report (1968, p.3) identified several areas of concern:

- problems achieving sufficient reliability in the data systems which are becoming increasingly integrated into the central activities of modern society
- difficulties meeting schedules and specifications on large software projects
- · education of software (or data systems) engineers

The problems observed in 1968 are strikingly similar to problems we have today.

The 1968 NATO report also used the term "Software Quality Assurance" for the first time. Conference participants discussed SQA and raised several interesting questions (p. 3):

 Is [SQA] done by an independently reporting agency representing the interests of the eventual user?

- Is the product tested to ensure that it is the most useful for the customer in addition to matching functional specifications?
- Do [SQA] test programs undergo the same production cycle and method (except Q/A) as the software they test? Are they defined and constructed concurrently with the software?
- · Can software field release be held up if these tests are not passed?
- Is the test library applied upon issuance of each modification of the software system?
- Is each customer's system tape tested on the software production machine for a sufficient period of time, where feasible?

Edsger Dijkstra, one of the distinguished participants at the 1968 NATO Conference, made an incredibly insightful remark that, while important in 1968, is even more important today:

"The dissemination of knowledge is of obvious value — the massive dissemination of error-loaded software is frightening." (p. 17)

Many of the issues raised more than 40 years ago still resonate today.

#### **Evolution of SQA**

What we now know as SQA was in flux during the 1970's. Given the successes of IV&V, SQA began life as an internal form of IV&V. The roles, responsibilities, and scope of work were adapted to this new form of IV&V as SQA started to take shape. By the end of the 1970's, the very first IEEE Software Engineering Standard was being written. The topic was Software Quality Assurance Plans and it was published as IEEE STD-730-1981 in 1981.

In the 1980's, the software industry experienced the "software crisis." This was the point in time when spending on software maintenance exceeded spending on new software creation. The "software crisis" resulted in many changes, not the least of which was the emergence of SQA as a critical function in software development rather than just an internal IV&V function.

Since the "software crisis," many companies have learned firsthand how painful and costly defective software can be. The work of industry legends such as Watts Humphrey, Capers Jones, and many others have provided factual information on just how expensive poor quality software is as well as what can be done to prevent and remove as many defects as possible. Humprey, Jones and others have taught us that the role of SQA should be:

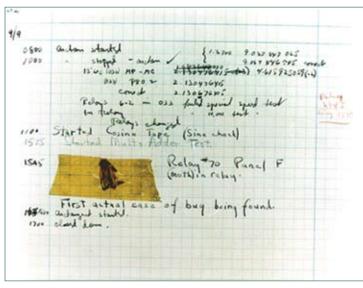
- To improve software quality by appropriately measuring and monitoring both the software and the development process that produced it
- · To ensure full compliance with established standards and procedures for the software and the software process
- · To ensure that inadequacies in product, process, or standards are brought to management's attention so they can be fixed

SQA at 50 - A Look Back



# Quality Engineered Software and Testing Conference

### (Article continued from page 7...)



#### By the way...

Do you know why we call them bugs? One of the earliest computers was called the Mark II Aiken Relay Calculator. It was an analog computer built from hundreds of electromechanical relays and vacuum tubes. These early computers were "programmed" by re-wiring patch panels that changed

operations performed by the relays and tubes.

One of the early "programmers" was Navy Admiral Grace Hopper, a brilliant mathematician who worked at Harvard on the Mark II. She tells of an event that occurred one late summer day. It was before the advent of air conditioning, so the windows in the lab were kept open. Admiral Hopper was trying to understand why a calculation she had "programmed" was not working correctly. A technician noticed that a dead moth on the contacts of one the relays, thus changing how the calculation was performed. Admiral Hopper carefully removed the moth, taped it into her lab notebook and made the entry shown at left.

#### The Future...

SQA continues to evolve from its roots as one independent tester on the Atlas Missile Program. Today, leading edge companies rely on SQA to a far greater extent than ever before to help improve customer satisfaction by releasing high quality software in a timely manner.

#### References:

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Nelson, J. G. (1979). "Software testing in computer-driven systems." In M. J. Fisher & J. D.

Cooper (Eds.), Software quality management. Princeton, NJ: Petrocelli Books.

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SQA at 50 - A Look Back



### Manager's Connection Dinner

# Sponsored by *QAI Global Institute* Monday, April 4th

This private event is reserved for the attendees of the Manager's Solutions Workshop, providing an opportunity to further discuss challenges and quality issues with the QAI faculty and subject matter experts in a more relaxed setting. This evening dinner outing is an ideal forum for networking with peers and exchanging ideas.

### **Welcome Reception**

# Sponsored by *uTest* Tuesday, April 5th

This reception is open to all conference attendees and is included in the registration fee. This event provides an opportunity to meet fellow conference attendees in an informal setting with appetizers, drinks, and raffles. Information will be provided to help out-of-town guests become familiar with the Boston area.

# Attendee Appreciation Evening Event: Spirit of Boston Cruise on Boston Harbor

# Sponsored by *Microsoft* Wednesday, April 6th

You haven't seen Boston until you've seen it from the water! The Spirit of Boston on Boston Harbor delivers a unique combination of dining, dancing, entertainment and spectacular views. All attendees are welcome aboard. Shortly after the conclusion of Wednesday's program, everyone planning to join the festivities will meet in a designated area to walk to the cruise ship as a group. This is a RSVP event that requires prior registration.

### **Exhibitors Wine and Cheese Reception and Raffles**

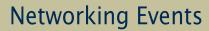
# Sponsored by *EXPO Exhibitors* Thursday, April 7th

The closing event of the Exhibitors EXPO is a Wine and Cheese Reception that is open to all conference attendees. This is a great opportunity to meet with the exhibitors in a social setting, and to network with fellow conference attendees. The main event at this reception will be the raffle of exhibitors' prizes. There is also a surprise entertainment planned for this reception.











# **Building Quality into Your Application Using Agile Practices**

# By Janet Gregory

DragonFire Inc.

I've heard many testers question agile methodologies. They cannot understand how a product can be delivered with quality if you don't have a test phase at the end to "ensure quality." It's a fair question when you don't understand how disciplined an agile project can be or don't understand the testing activities throughout the project.

In 1982, W. Edward Deming published Out of Crisis where he identified 14 key principles for business effectiveness. I first encountered these principles when I was taking my ASQ Quality Management Certification but I came across them again lately. It is amazing that over 10 years later, I can apply them in a completely different way.

When agile software development is practiced with discipline, as it is meant to be, a team will naturally adhere to Deming's 14 points. In this article, I will focus on his third point discussing how agile software development applies this principle.

Cease dependence on inspection to achieve quality. Eliminate the need for massive inspection by building quality into the product in the first place. (Deming, p. 23)

Quality built into the process is precisely how agile methodology promises to deliver software at the end of every iteration (a one to four week development cycle). While the release schedule may call for changes to an existing product or new application every three to six months, or sometimes even less, development teams that are consistent in following agile practices, produce a potentially releasable product at the end of each short iteration. This means that the application being developed is tested, has customer acceptance, and has been integrated with other components.

Cross-functional agile teams use techniques such as acceptancetest driven development (ATDD) to ensure that new functionality is being developed to meet the customer's needs. The customer or customer proxy creates tests and examples to define what they expect and the team delivers to those tests. Crossfunctional teams, preferably co-located, encourage face-to-face communication and collaboration so there is less confusion and misunderstanding about what to build.

Agile teams practice a whole team approach, which means that the entire project team is responsible for quality. Testers work side by side with developers and customers to help uncover hidden assumptions and define tests early that help to drive development. Stories, think of them as requirements for now, are tested as soon as they are coded. This allows immediate feedback to the developer. Any discrepancies or defects can be addressed right away.

The whole team is "test-infected." The programmers create automated unit tests for every piece of code they write. Test-

driven development is used, one method to design code for testability. Shared code ownership is adhered to, which means that responsibility for good code is shared by all programmers and each is held accountable for following the standards defined by the team. They also refactor to keep the code clean and free of technical debt, code that hinders productivity.

Continuous integration is also a key agile practice. Code is constantly built into a deliverable package with the automated unit tests run as soon as the programmer checks in their code. When the project team practices ATDD, the acceptance tests and other story tests are automated using collaborative tools so that programmers, testers, and customers share the responsibility of those tests. These functional tests that use the API layer are less brittle and can usually be run against the build. Together with the rest of the automated regressions suite, they run at least once a day, which means integration is not left until the end of the project. Problems encountered during integration are found and addressed early.

Non-functional tests such as security, load, and performance are considered with each story, and are tested when applicable. It is the goal that these tests are not left to the end. Customers view new features as they are built giving feedback early and often so that developers are aware of any issues and can make changes as necessary. The process is about transparency so that all stakeholders have visibility into the progress at all times.

Practicing agile development means building quality into the process and into the application. Testing isn't left to the end; it's an integral part of the software development process. Testers on agile teams are valuable team members committed to delivering the best product they can by focusing on bug prevention rather than bug detection. The whole team works together to maintain quality processes developed and followed to ensure the product delivered to the customer meets their needs and delivers the business value promised.

#### References

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Crispin, L. & Gregory, J. (2009). Agile testing: A practical guide for testers and agile teams.

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Deming, W.E. (2000). Out of Crisis. Cambridge, MA: MIT Press.

# Building Quality into Your Application Using Agile Practices









# **Certification Prep Courses**

Monday, April 4 and Tuesday, April 5

# Certified Software Test Engineer (CSTE) Prep Course

The Certified Software Test Engineer Prep Course is designed specifically to prepare the quality testing professional for the CSTE examination. This is a 2-day course taught by a certified QAI instructor. The course aids the quality testing professional in focusing in on the topics that are important for understanding, thus helping toward the successful completion of the exam. This course is not intended to supplant the need for proper examination preparation. However, it will serve as an excellent review of the CSTE Common Body of Knowledge (CBOK) which consists of the ten skill categories listed below. Sample exam questions are provided throughout the course.

- 1. Software Testing Principles and Concepts
- 2. Building the Test Environment
- 3. Managing the Test Project
- 4. Test Planning
- 5. Executing the Test Plan

- 6. Test Status, Analysis, and Reporting
- 7. User Acceptance Testing
- 8. Testing Software Developed by Outside Organizations
- 9. Testing Software Controls and the Adequacy of Security Procedures
- 10. Testing New Technologies

# Certified Software Quality Analyst (CSQA) Prep Course

The Certified Software Quality Analyst Prep Course is designed specifically to prepare the quality assurance professional for the CSQA examination. This is a 2-day course taught by a certified QAI instructor. The course assists the quality assurance professional in focusing on the topics that are important for understanding, thus helping toward the successful completion of the exam. This course is not intended to supplant the need for proper examination preparation. However, it will serve as an excellent review of the CSQA Common Body of Knowledge (CBOK) which consists of the ten skill categories listed below. Sample exam questions are provided throughout the course.

- 1. Quality Principles and Concepts
- 2. Quality Leadership
- 3. Quality Baselines (Assessments and Models)
- 4. Quality Assurance
- 5. Quality Planning

- 6. Define, Build, Implement, and Improve Work Processes
- 7. Quality Control Practices
- 8. Metrics and Measurement
- 9. Internal Control and Security
- 10. Outsourcing, COTS, and Contracting Quality

# **CSTE and CSQA Practice Examinations**

### Friday, April 8

Have you thought about becoming certified but wondered how your current knowledge and skills compare to the Common Bodies of Knowledge for CSTE and CSQA?

With your registration to the 3-day conference, you can take a complimentary full practice examination for the Certified Software Test Engineer (CSTE) or the Certified Software Quality Analyst (CSQA). The practice examinations will be held on Friday and will begin immediately after the Keynote Speaker presentation. The two multiple choice sections of the examinations will be graded on-site when you turn in your completed exam, so that you will receive an immediate assessment of your skills. The essay sections will be evaluated after the conference by Software Certifications and feedback will be provided to you.

# **Professional Certifications**



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# The Great Quality Challenge for Mobile Apps

# By Doron Reuveni

uTest

The mobile enterprise is no longer on its way - it is here. This is creating a mobile app revolution that is driving the need for fast, effective application testing that mimics your user base in terms of technical environments, locations, and demographics. And while it's tempting to think that mobile apps won't alter your company or industry, no space is exempt from the mobile revolution. It is critical that companies, from startups to enterprises, are ready to address the challenges that mobile apps bring to the development and testing processes.

According to a recent survey by Bloomberg Businessweek Research Services, enterprise mobility is no longer just for email. Employees are using mobile apps to access CRM systems, financial results, marketing campaigns, and to track orders, to name just a few. In fact, ABI Research anticipates worldwide enterprise mobile data revenues will reach \$133 billion by 2014.

New apps for BlackBerry, iPhone, iPad, and Android are making deep in-roads into enterprise organizations in industries as diverse and mature as healthcare, finance, education, media, and retail. This means that the pressure to get high-quality mobile apps built, tested, and launched has never been greater. With so much critical data flowing to smart phones and tablets, companies must ensure that their mobile apps are stable, private, and secure. Even the smallest flaw can ruin a mobile app, and sometimes, the company behind it.

For those who haven't been living in the mobile space, it's important to note just how different mobile apps are compared to the worlds of web and desktop apps, not to mention sets of very different rules. The mobile web and native apps present distinct challenges for companies and require new skill sets for design, engineering, and testing. For a mobile app to work as intended, consider the multi-dimensional testing matrix. There are multiple operating systems, different mobile browsers, myriad smartphone device makers and models, a host of carriers, and worldwide locations. With all these criteria, it's clear that the cost and complexity of managing QA in the mobile era is not something many organizations are equipped to handle.

If an organization does not focus on the functionality, usability, reliability, and security of the application, they may find themselves in the awkward position of explaining to their customers, or the CEO, why their application was rejected by the apps store, or why users are sharing their dissatisfaction on Twitter, Facebook, TechCrunch, and others. This mobile quality challenge calls for a better way to test, one that meets the "in-thewild" testing demands of mobile apps.

# **Three Alternative Testing Methods**

The three testing approaches that have historically been used in mobile are insufficient for the challenges of this new reality. That doesn't mean they are bad or ill-intentioned, merely that they aren't sufficient on their own. Here's a quick summary:

1. Offshoring: While offshore testing has proven to be less expensive than hiring an internal team, developers who have contracted with such firms quickly find themselves with no insight into day-to-day testing activities, losing what little control they had over the process. In addition, even the largest outsourcing firms don't have the

- resources needed to provide adequate real-world testing coverage across location, handsets, carriers, and OS.
- 2. Emulators/Simulators: One of the biggest challenges for mobile developers is that traditional testing is occurring in an environment far removed from the real world. The gap between "in-the-lab" simulation and "in-the-wild" usage is vast and cannot be ignored. The convenience of simulators and emulators has made it easy to be lured into a false sense of security, but they should not be considered a substitute for real-world, on-device testing.
- 3. Beta Testers: It's rare for a software company to attract a large group of beta testers to test their app. After all, not every company can be Google, with its wildly popular beta versions. But even if you can assemble a large beta group, the method still falls short on its own. First, if a beta goes poorly, most companies can't afford to have it happen in the bright lights of the blogosphere or Twitterati. Beta testers are more often like users in that they will only try to get your app to function properly; a real tester will systemically structure their usage to identify weaknesses in your app.

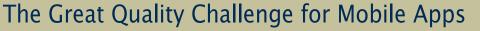
#### Crowdsourced Mobile App Testing

The increasingly fragmented device and platform environment has escalated the demand for comprehensive, always-on global testing; however, testing mobile apps has traditionally been difficult and prohibitively expensive. The testing matrices for mobile apps are exponentially more complex than for web and desktop apps. No matter what type of mobile app, multimedia, chat, business, or productivity tools, all mobile app developers face the same testing complexity across:

- · Handset Makers & Models
- · Operating Systems
- Browsers
- · Wireless Carriers
- · Languages (for multi-geo apps)
- · Location, Location

Through crowdsourcing, companies can meet mobile's "in the wild" testing needs by utilizing a community of diverse and talented professional testers, capable of testing their app across any and all criteria, and on an on-demand basis. Your users are distributed around the country (or globe), so your testers should be too. And just as your users utilize your app outside the sterile confines of the testing lab, under "in the wild" conditions so too should your testers.

With the rapid evolution of crowdsourced testing, top companies are doing the impossible: maintaining app quality, achieving broad testing coverage, meeting launch dates, and staying within budget. As the mobile market doubles and triples in size over the next decade, those that have made testing coverage a priority will enjoy their ROI in terms of increased market share, profitability, and above all, user loyalty.





# **AGILE CLASS**

# Agile Testing Janet Gregory DragonFire, Inc.

Track 1: 8:30 a.m. - 4:30 p.m.

Did you ever wonder what a tester does on an agile team? There are no formal written requirements documents from which to create test cases and the features aren't complete before they need to be tested. It can be confusing for testers who are new to agile teams. This is particularly true since agile development project teams often don't understand how beneficial having a tester can be to the overall success of the project. In this class, we'll follow an agile tester through typical two-week iteration, and more. We start with how testers contribute during release and iteration planning and then follow a tester from the start, through to the end of an iteration to see what activities he does and how he adds value. Finally, we examine the agile tester's role in a successful release, including the end game, UAT, packaging, and documentation. Exercises and discussions will reinforce the learning.

- Understand the role of a tester on an agile team
- Investigate how testing fits into the agile process
- Learn how to keep up with development

#### About the instructor...

Janet Gregory is a consultant whose specialty is promoting agile quality processes and working with teams to

build quality systems. She has helped to introduce agile practices into companies as both tester and coach and has successfully transitioned many traditional test teams into the agile world. Her focus in these transitions is working with the business users and testers to help them understand their role in agile projects. Janet is co-author with Lisa Crispin of Agile Testing: A Practical Guide for Testers and Agile Teams and a contributor to 97 Things Every Programmer Should Know.

# **MEASUREMENT CLASS**

# Metrics for Managing and Improving Software Testing Shaun Bradshaw

Zenergy Technologies

Track 2: 8:30 a.m. - 4:30 p.m.

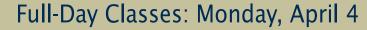
In this class, Shaun will introduce and explain the concept of software test measurement. A combination of lecture, classroom exercises, and experiential techniques will be used to underscore the importance of test measurement. Shaun will discuss how to introduce the idea to an organization, ensuring that tracked measurements and metrics align with the needs of that organization. The training will identify activities necessary to lead a test effort, measuring and tracking its progress, and ensuring timely and accurate delivery of the tested application to the production environment. As part of this class, you will receive detailed instructions on a variety of metrics that enable you to measure the completed work effort, communicate final results to clients, and plan more effectively and efficiently for future projects.

- Identify important measurements that align with business objectives
- Determine the value of development and testing processes using measurement
- Provide quality and process feedback throughout a project



#### About the instructor...

Shaun Bradshaw has spent the last 14 years working with a variety of clients to improve their QA and test processes by advising, teaching, and mentoring them on the use of effective testing and test management techniques. He is the co-author, editor, and trainer of a suite of methodologies covering testing, test management, and test metrics. Shaun speaks at many of the major industry conferences and is well-known for his presentations on test metrics, the S-Curve, and the Zero Bug Bounce. Shaun is a graduate of the University of North Carolina at Greensboro with a Bachelor of Science in Information Systems.





# **RISK-BASED TESTING CLASS**

# Risk Based Testing Analysis and Strategy **Clyneice Chaney**

**MITRE** 

Track 3: 8:30 a.m. - 4:30 p.m.

By testing a system, we hope to identify many of the problems before they get to the customer. Unfortunately, the rapid pace of development challenges even the simple act of completing testing, let alone testing thoroughly. The Gartner Group estimates that 30% of annual IS budgets and 60% of annual development budget is spent on testing. If testing can become more efficient by designing the minimum number of required tests with 100% functional coverage, then development ROI will substantially increase and system risk will decrease. Can risk based test management provide a solution to this problem? Since it isn't cost effective to test exhaustively, testing must be rigorously planned. The basis for that planning can be risk, testing more thoroughly those areas that are projected to be riskier or to cause greater harm. This class focuses on identifying and prioritizing risks then developing the right test strategy to help testers provide what is needed to meet today's testing challenges.

- Discover product risk identification and analysis techniques
- Discuss risk test strategy development
- Learn how to track and report defects based on the risk test strategy

#### About the instructor...

Clyneice Chaney brings over 20 years of testing, quality assurance, and process improvement experience. Clyneice



holds certifications from the American Society for Quality as a Certified Quality Manager, QAI Global Institute's Certified Quality Analyst, and Project Management Institute's Professional Project Manager. She has participated as an examiner for state quality awards for Georgia and Virginia. She is currently an instructor for the International Institute for Software Testing and has presented technical papers at the Software Engineering Institute: SEPG Conference, American Society for Quality: Quality Manager's conference, Quality Assurance Institute International Testing Conference, International Conference on Software Process Improvement and Software Test and Performance Testing Conferences.

# **TEST AUTOMATION CLASS**

# Test Automation for Managers: A Guide to Success **David Dang**

Zenergy Technologies

Track 4: 8:30 a.m. - 4:30 p.m.

In the IT environment, managers are expected to do more with less. QA managers are looking for every possible way to ensure better quality of software and reduce test cycle time. One of the most common methods is to implement test automation. And, with so many promises of reduced test execution time and increased test coverage, QA managers are almost obligated to try their hand at it. While there are well-documented success stories, there are also numerous horror stories detailing spending hundreds of thousands of dollars and abandoning the effort after the first year. The lack of success can be summarized as a lack of understanding, lack of planning, and lack of commitment. In this class, David will address these three main problems by focusing on how test automation tools work, factors that must be taken into consideration when planning for test automation, and the resources and timeline needed to implement test automation.

- Understand test automation planning
- Investigate test automation approaches
- Explore available test automation tools and trends

### About the instructor...

David Dang is an IT professional with over 15 years of experience focusing on test automation and QA/test process improvement. He has extensive experience



in test automation, management, planning, analysis, execution, and metrics. David has proven ability to assess, design, and implement test automation frameworks having worked with over 100 companies to assist and drive their test automation and QA projects. David is a HP Certified Instructor (CI) for QuickTest Professional, WinRunner, and QualityCenter. He is a featured speaker on test automation and related topics at local and national QA and Testing conferences. David received his BS in Management Information Systems and BA in Psychology from the University of Buffalo.

Full-Day Classes: Monday, April 4



# **RAPID TESTING CLASS**

# Rapid Software Testing Organizations Jon Bach

eBay

Track 5: 8:30 a.m. - 4:30 p.m.

Rapid testing is an approach to achieve thoughtful testing on compressed schedules leveraging the power of exploration. It focuses on real-time problem-solving, scientific inquiry, and investigation. In this class, you'll get ideas on how to test in a context-driven manner, as thoroughly as your context requires. A good rapid tester is a thinker who can test and explain their testing in such a way that their work stands up to scrutiny under a wider variety of conditions than conventionally trained testers. Based on the ideas of James Bach, Michael Bolton, and Cem Kaner, with substantial contributions by other members of the Context-Driven School of software testing, this one-day class is akin to learning a martial art; it will focus on exercises that build skill and help you wrestle with realistic and complex testing problems.

- Learn how to tackle any product or product idea instantly
- Explore how to analyze a test heuristic or practice
- Understand how to test despite ambiguous or missing specifications



### About the instructor...

Jon Bach is a recent addition to eBay (San Jose) as a QA Director for the Buyer

Experience team. Jon has 15 years of experience in testing, serving as a contract test engineer, full-time tester, manager and consultant at a variety of companies including Microsoft, HP, and LexisNexis. Jon is the co-creator of Session-Based Test Management and the creator of Open-Book Testing. He is a seasoned conference speaker, writer and blogger in testing, and the current president of the 2011 Conference for the Association for Software Testing (CAST).

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Business today depends on technology as never before — to drive transformation, productivity and global operations. Any technology initiative not tightly linked to specific, measurable business goals risks delivering an empty promise. Technology is about transactional solutions handling day-to-day operations. And, it's a rich portfolio of applications and systems with wide functional breadth. Companies that integrate these assets for effective decision-making can drive their competitive advantage.

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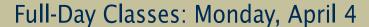
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# Independent Testing Suppliers on the Advance

Over the course of the last three years, an independent IT outsourcing market has developed in managed testing services (MTS)

oftware testing and software development never form part of the core business of a company. This creates a significant challenge since quality assurance has never been more important. Any business wanting to handle quality assurance internally needs to equip itself with the right personnel on a permanent basis. This often doesn't make commercial sense unless an organisation is certain it will make full use of the resource continuously.

The obvious answer is to outsource testing but that throws out another issue. In practice, this generally means outsourcing to the teams that developed and implemented the system, so they quality test their own work. "If customer requirements are going to be met, it's important to divide the tasks up sensibly. At the very least, the same company shouldn't implement and test its own systems," explains David Cotterell, SQS Software Quality Systems' CEO of Northern Europe, India & Africa.

This is why onsite testing is moving into the independent sector with companies like SQS. As specialists they provide an attractive proposition not only because of their expertise, but also their flexibility in combining offshoring or nearshoring, so allowing them to offer the keenest pricing to their clients.

In a study carried out in 2009, PAC (Pierre Audoin Consultants) predict double-digit growth rates in the market for managed testing services over the next four years, expecting it will nearly double from its current level of almost 100 million euros.

# Cost savings of 40 per cent

One of the greatest advantages of managed testing services is the high level of automated testing, which cannot usually

"Based on nearly three years' project experience in managed testing services, we are able to promise that the initial investment will pay for itself as soon as test automation comes into operation"

David Cotterell, **SQS Software Quality** Systems' CEO of Northern Europe, India & Africa

be achieved in-house. Through automation, testing can be performed by practically any member of staff based on detailed process and test case information.

MTS projects work best on a global delivery model. The first stage is to perform assessment tests to understand the testing scenario. Test experts then identify the SQS test centre in Pune, India savings potential, verify



these during a pilot project and communicate them to the company in a customer-specific price model.

Another advantage of MTS is that it reduces processing time whilst simultaneously increasing test coverage and quality. Thanks to offshoring and an automated testing approach, SQS figures demonstrate that MTS achieve cost savings of over 40 per cent in the course of a project lasting three to five years.

It's essential for the customer to understand their involvement in testing. "You can't put all of the responsibilities in the Service Level Agreement (SLA) and assume you're covered since certain management roles must remain within the company," explains David Cotterell. MTS has to be integrated smoothly into governance and customer processes, and should ideally be carried out using standard reporting. During the project a service provider can offer monitoring methods and tools such as dashboards showing key performance indicators (KPIs) and regular, standardised status reports on the ongoing collaboration so that companies retain control over their outsourced test activities at all times.

## Strict standards

SQS prides itself on the quality of the testing tools and the standards it uses.

Customer reservations about offshoring test centres are less and less of a concern. "Customers tend to be familiar with the offshoring or nearshoring of software development, so they don't need to be persuaded when it comes to testing, but they can still be worried about data protection and security. We find any last remaining doubts have always

> been dispelled by an on-site visit to our test centres in South Africa (Durban), India (Pune), Egypt (Cairo), and Germany (Görlitz).



# **ESTIMATION TUTORIAL**

# Estimating and Controlling Testing Robin Goldsmith, JD

Go Pro Management, Inc.

Track 1: 8:30 a.m. - 12:00 p.m.

Unreliable estimates are a major reason managers allocate inadequate time and resources to testing. Historically, estimating has been so weak in IT that some people simply assume it is impossible to estimate IT activities accurately. Test estimates are especially prone to problems because they often depend on other unreliable estimates. In fact, though, it is possible to estimate accurately and substantial direct and indirect benefits can result. This interactive tutorial describes key principles of effective estimating and how to apply those principles to the unique aspects of testing. Rather than viewing estimating as just a static up-front exercise, the tutorial shows dynamic techniques that effective estimators use throughout the project to control progress as well as to refine and improve their estimates and estimating skills. Exercises enhance learning by allowing you to practice applying practical techniques to realistic examples.

- Understand the strengths and issues of top-down and bottom-up estimates
- Reliably identify the tests and estimate the tasks
- Learn to control test activities and refine estimates

#### About the instructors...

Robin F. Goldsmith, JD is President of Go Pro Management, Inc., consultancy. He works directly with business and sys-



tems professionals in requirements, quality and testing, metrics, ROI, software acquisition, and project and process management. Previously, he has held development, quality, and lead roles with the City of Cleveland, leading financial institutions, and a "Big 4" consulting firm. A member of the IEEE Software Test Documentation Std. 829-2008 Revision Committee, IIBA BABOK subject expert and reviewer, and formerly International Vice President of the Association for Systems Management, and Executive Editor of the Journal of Systems Management, Robin is the author of the Proactive Testing™ methodology and the recent book, *Discovering REAL Business Requirements for Software Project Success*.

# **TEST PLANNING TUTORIAL**

# Beyond the Templates: Adaptive Test Planning Lynn McKee

**Quality Perspectives** 

Track 2: 8:30 a.m. - 12:00 p.m.

Test planning appears in many forms. It may be a formal exercise focused on the development of a comprehensive, pre-emptive document labeled Test Plan. Or, it can be a dynamic, lightweight exercise constantly adapting to changes in the project and organizational needs. Templates are often developed to assure "best practices" and standardization. It is important to consider though that this standardization may restrict our ability to apply critical and creative thinking and to effectively respond to specific circumstances. With the diversity in organizations and projects, testers need to focus on effective, context driven test planning. Beyond the confines of templates and standardization, the objective remains to define a strategy for gathering insightful and timely quality-related information for stakeholders. Context driven test planning aligns the test strategy to the unique organizational goals and project specific constraints, and emphasizes the importance of adaptability. When changes occur in the project mandate or quality issues are revealed, the context of the testing changes and the strategy must adapt.

- Review the diverse use of and common approaches to test planning
- Examine the challenges in using cookie cutter test planning templates and approaches
- Learn the concepts behind context driven testing and the importance of adaptability



### About the instructor...

Lynn McKee is an independent consultant with 15 years of experience in the IT industry and a passion for helping organizations, teams and individuals deliver valuable software. Lynn provides consulting on software quality, testing, and building high performing teams. An advocate of the context-driven perspective, her focus is on ensuring testing teams are enabled with effective, adaptive, and scalable approaches aligned with the organization's quality needs. Lynn is an active member of numerous software testing associations, speaks at conferences, writes articles, and contributes to blogs and forums. Lynn is the co-founder and host for the Calgary Perspectives on Software Testing Workshop.

# Half-Day Tutorials - Tuesday, April 5



# **TESTING VALUE TUTORIAL**

# Creating Value with Your Testing Selena Delesie

Delesie Solutions

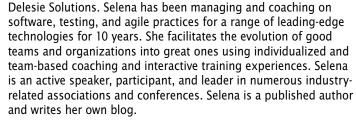
Track 3: 8:30 a.m. - 12:00 p.m.

Many testers mourn the dismal state of their role within the company, not valued, not respected, and often excluded from important project communications. Sometimes we forget that our role as a tester is to provide a service to our organization, which means we serve our stakeholders needs not the other way around. If we don't meet the needs of our stakeholders, we are unable to add value for the company. If we don't communicate in a way that connects with those needs, we are unable to demonstrate that we are adding value. Attend this tutorial to share and learn how to get stakeholders clamoring for your project involvement, respecting your opinion, taking responsibility for quality as well, and truly valuing the work you do. You'll soon be able to guide testing in your company toward a brighter future.

- Learn to tailor testing information to the needs and interests of stakeholders
- Understand context-specific testing is important
- Discover how to transform into a service provider

#### About the instructor...

Selena Delesie is a consulting software tester and agile coach, the owner of





# PROCESS IMPROVEMENT TUTORIAL

# 'No Time' Approaches for Quality Improvement Rebecca Staton-Reinstein, PhD

Advantage Leadership, Inc.

Track 4: 8:30 a.m. - 12:00 p.m.

Too often improvement of software and quality assurance related processes have failed even when people had initial management support. There are several common root causes for this problem including lack of institutionalization, lack of demonstrable ROI, lack of defined and measurable processes, and burdensome, slow moving methodologies. Yet, the basics of processes improvement as proven by Deming, Juran, Ishikawa, and others are readily accessible, do not require much time to apply, and can be deployed by an individual or small informal team without elaborate overhead. In this tutorial you will learn both guerilla quality improvement techniques and guerilla marketing techniques to help you make an effective appeal to you management. You will learn practical approaches to documenting, improving, and measuring your processes, as well as demonstrating ROI to management. You'll learn how to apply these successful approaches officially and unofficially. You'll receive a resource list including free or low-cost tools, templates, and guidelines. You'll leave with your own personal guide to action specifically tailored to your situation.

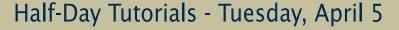
- Get improved results from improved processes by applying GSEP
- Learn how to demonstrate ROI to management for improved process initiatives
- Develop your personal guide to action

#### About the instructor...

As President of Advantage Leadership,

Inc., Rebecca Staton-Reinstein, Ph.D., CSQA, works with companies to improve the quality and productivity of software-related efforts. She helps IT organizations assess the current situation and create strategic plans to engineer successful processes, establish business-oriented measurement, and improve bottom-line results. She works with both technical and managerial staff to discover hidden costs and demonstrate ROI. Rebecca has successfully established three QA organizations; she has an international client base, and is the author of books on improving software quality and strategic planning including Get Great Requirements, The Hard Job of Making Software Work: Building the QA Function Stepby-Step, Success Planning: A 'How-To' Guide for Strategic Planning, and Conventional Wisdom: How Today's Leaders Plan, Perform, and Progress Like the Founding Fathers.







# **SECURITY TESTING TUTORIAL**

# How Hackers Do It: A Guide to Security Testing Web Applications Rafal Los

Hewlett-Packard

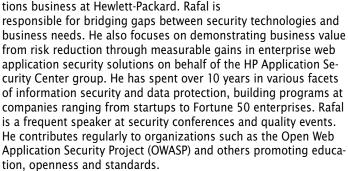
Track 5: 8:30 a.m. - 12:00 p.m.

Security teams face an ever-increasing volume of complex web applications that require "security testing." QA analysts can provide needed support and enable security testing much earlier in the development lifecycle, but not without the proper training. This tutorial is aimed at QA analysts who want to learn how hackers break into web applications and how to use that knowledge to assist security teams. You will be provided a foundation for understanding web application security testing from identifying potentially vulnerable targets to basic attack strategies and advanced tools based hacking techniques.

- Learn how to build security testing into existing QA testing processes
- Examine the most common web application defects
- Understand the concept of "negative testing"

#### About the instructors...

Rafal Los is the Web Application Security Evangelist for the HP Software & Solutions business at Hewlett-Packard, Rafal i





# **TESTING COE TUTORIAL**

# Building a Successful Testing Center of Excellence James Campbell

Tulkita Technologies

Track 1: 1:00 p.m. - 4:30 p.m.

This workshop will provide a roadmap for strategizing and building a testing center of excellence within your organization. Building a TCoE is more than just knowing how to test. To be successful, an organization must know how to build a TCoE such that it aligns to the enterprise IT strategy, budgets, and the corresponding cost/ benefits associated with a TCoE. This tutorial will go into the hands on details describing how a TCoE should be built and the operating model to support its ongoing viability and success.

- Understand the steps required to mobilize a TCoE, including the business case
- Learn how to sell a TCoE to the business and IT stakeholders
- Discover the success factors in operating a TCoE

#### About the instructor...

James Campbell has architected and designed over 45 unique TCoEs across the globe. He has completed testing strategies and roadmaps for over 120 organizations and has overseen the successful implementation of over 20 large-scale testing engagements. James previously launched and managed a North American Testing Centre of Excellence for a large global management consulting and technology company. Currently, James is the Director of Strategic Sourcing at Ontario Teachers Pension Plan where he is an industry expert in sourcing and offshore delivery, including testing. James also is the founder and executive director of Tulkita Technologies Inc., a specialized services company focused on the strategy and effectiveness of Quality Assurance. Tulkita provides its customers with specialized solutions in Test Strategy & Planning, Optimization and Training.

# Half-Day Tutorials - Tuesday, April 5



# **TEST DESIGN TUTORIAL**

# Crash Course in Test Design Methods **Peter Zimmerer**

Siemens AG

Track 2: 1:00 p.m. - 4:30 p.m.

Starting with a risk-based testing strategy, a good test design is the key for effective and efficient testing. In this tutorial, Peter will explain important principles and preconditions for test design, such as the motivation for and benefits of the design. What are the limitations and preconditions? Who are the stakeholders? Next, Peter will present a unique approach to foster the use of test design methods by delivering a systematic, structured, and categorized overview of different test design techniques, exploring several in detail. Combinatorial testing methods, in particular, will be illustrated in-depth. Additionally, Peter will provide a tool to assist you in introducing these methods to your organization. Attend this tutorial and understand not only the big picture of test design methods, but be able to use these approaches in your practice as well.

- Get to know the benefits, preconditions, and fundamental principles of test design methods
- Identify who should care about and use test design methods
- Learn the tools to put these methods into practice



#### About the instructor...

Peter Zimmerer is a Principal Engineer at Siemens AG, Corporate Technology. He has been working in the field of software testing for more than 19 years. At Siemens he performs consulting and training on test management and test engineering practices including test strategies, test methods, test processes, test automation, and test tools in real-world projects and drives research and innovation in this area. He is an ISTOB® Certified Tester Full Advanced Level and regular speaker at international testing conferences in Europe, Canada, and USA.

# **AGILE METHODS TUTORIAL**

# A Test Leadership Guide to Going Agile **Robert Galen**

RGCG, LLC

Track 3: 1:00 p.m. - 4:30 p.m.

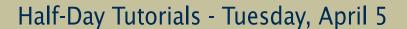
So much of moving traditional test teams toward agile methods & testing is focused on the individual tester and testing techniques. As often is the case with agility, directors, managers, team leaders, and test-centric project managers are marginalized. Not in this tutorial! Here we focus on agile testing from the perspective of the test leader. Join experienced agile test leader and coach Bob Galen as you explore the central challenges associated with agile adoption including how to transform your teams' skills to agile practices, how to hire agile testers, practices for creating a "whole-team" view of quality by focusing on executable requirements and creating powerful done-ness criteria. Beyond tactical leadership, Bob will also explore strategies for becoming a partner in your agile adoption pilots, changes to your testing automation strategies that agile demands, and how to adjust your traditional planning and metrics to more agile-centric approaches that engage your stakeholders.

- Team transformation: Identifying skill gaps and how to fill them quickly
- Defining and executing your agile pilot including development of an agile adoption strategy
- How to define and activate quality criteria that drives agile deliverables



## About the instructor...

Bob Galen is an agile methodologist, practitioner, and coach who helps to guide companies and teams in their pragmatic adoption and organizational shift towards Scrum and other agile practices. He is currently the Director of R&D and Agile Coach at iContact, an email marketing SaaS provider. He is also President and Principal Consultant for RGCG, LLC. Bob has over 25 years of experience working in a wide variety of companies. He is a Certified Scrum Master Practicing (CSP), Certified Scrum Product Owner (CSPO), and an active member of the Agile Alliance and Scrum Alliance. Is the author of several books including Scrum Product Ownership - Balancing Value from the Inside Out.





# **PEOPLE / TEAMS TUTORIAL**

# Coaching as a Two-Way Relationship Johanna Rothman

Rothman Consulting Group, Inc.

Track 4: 1:00 p.m. - 4:30 p.m.

Coaching is one of the most important and most difficult responsibilities of leaders. Too often, people struggle and fail when it comes to coaching others. Coaches may try to impose their style on someone for whom it doesn't fit. Some coaches try to transfer "best practices" regardless of how well they work within the organization. Other coaches only talk. Coaching is a two-way relationship between a coach and the coachee. And, not all the learning is on the coachee's part. If a coach is not learning as they go, the coachee is shortchanged. This tutorial will explore how to recognize when you are the right coach and when you're not. You will explore multiple coaching techniques so you can choose the one that best fits you, the other person, and the context. You will practice coaching in several ways and discover which ones you prefer, and which ones you might need to practice more. And, we'll see how to learn as you coach.

- Learn multiple approaches to coaching
- Discover how to understand what the problem really is
- See how to help everyone involved benefit from coaching

#### About the instructor...

With over 30 years of experience in software and hardware product development, Johanna Rothman helps



managers and leaders solve problems and seize opportunities. She consults, speaks, and writes on managing high-technology product development. She enables managers, teams, and organizations to become more effective by applying her pragmatic approaches to the issues of project, risk, and people management. Johanna publishes The Pragmatic Manager, a monthly email newsletter and podcast, and writes two blogs. She is the author of several books and a host and session leader at the Amplifying Your Effectiveness Conference.

# **MOBILE APPLICATIONS TUTORIAL**

# The Mobile App Testing Challenge: Everything You Need to Know Doron Reuveni

uTest

Track 5: 1:00 p.m. - 4:30 p.m.

With new applications for BlackBerry, iPhone, and Android making deep inroads into enterprise organizations in industries as diverse and mature as healthcare, banking, and retail, the pressure to get apps built, tested, and launched has never been greater. With so much critical data flowing to smartphones, companies must ensure that mobile apps, the ones your company produces and that employees use, are stable, private and secure. The testing methods that have worked for web and desktop apps aren't sufficient to meet the testing needs of mobile apps. The testing matrices in the mobile app world have become too multidimensional and complex. Depending on whether your company builds a native app or a mobile website, companies must test their apps across handset makers, handset models, locations, wireless carriers, OS, browsers and more. In this half-day tutorial, we will discuss everything you need to know about mobile app testing including a live interactive demo on how to test mobile apps.

- Understand the differences between mobile testing vs. Web or desktop testing
- Explore how to meet mobile's "In-The-Wild" testing demands
- Learn where crowdsourcing fits

#### About the instructor...

Doron Reuveni co-founded uTest in February, 2007. Since its inception,

February, 2007. Since its inception, uTest has provided functional and load testing services through a community that includes more than 30,000 professional testers from 165 countries around the globe. He is a published author and expert in testing methodologies for web, desktop, and mobile applications. Prior to uTest, Doron was the Senior Vice President of Technology at Enigma, Inc., delivering large-scale software implementations through his global team of product managers, developers, QA professionals, and project managers. He has more than 20 years of experience delivering software applications to Fortune 500 companies as well as young, agile startups.

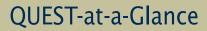


# Half-Day Tutorials - Tuesday, April 5



Monday, April 4, 2011						
7:00 AM - 8:30 AM	Registration & Breakfast	:				
Full Day Classes				10 A	M Break, 2:30 PM Break	
TRACKS:	Agile	Measurement	Risk-Based Testing	Test Automation	Rapid Testing	
8:30 AM - 12:00 PM	Agile Testing	Metrics For Managing and Improving Software Testing	Risk Based Testing Analysis & Strategy	Test Automation for Managers	Rapid Software Testing	
Instructor:	Janet Gregory, DragonFire, Inc.	Shaun Bradshaw, Zenergy Technologies	Clyneice Chaney, MITRE	David Dang, Zenergy Technologies	Jon Bach, eBay	
12:00 PM - 1:00 PM		Lunch				
1:00 PM - 4:30 PM	Agile Class Continued	Measurement Class Continued	Risk-Based Testing Class Continued	Test Automation Class Continued	Rapid Testing Class Continued	
Two-Day Workshop and Classes 10 AM Break, 2:30 PM Break						
8:30 AM - 4:30 PM	Manager's Solutions Workshop		CSTE Prep Class	CSQA Prep Class		
Instructor:	Nancy Kastl and Tom Ticknor			Neil Price-Jones	Barbara Merwin	
5:30 PM - 7:30 PM	Manager's Connection I	Dinner - Sponsored by Q	Al Global Institute			

Tuesday, April	5, 2011					
7:00 AM - 8:30 AM	Registration & Breakfast	:				
Half-Day Tutorials					10 AM Break	
TRACKS:	Estimation	Test Planning	Testing Value	Process Improvement	Security Testing	
8:30 AM - 12:00 PM	Estimating and Controlling Testing	Beyond the Templates: Adaptive Test Planning	Creating Value with Your Testing	'No Time' Approaches for Quality Improvement	How Do Hackers Do It: A Guide to Security Testing Web Applications	
Instructor:	Robin Goldsmith, JD, Go Pro Management, Inc.	Lynn McKee, Quality Perspectives	Selena Delesie, Delesie Solutions	Rebecca Staton- Reinstein, PhD, Advantage Leadership, Inc.	Rafal Los, Hewlett-Packard	
12:00 PM - 1:00 PM	Lunch					
Half-Day Tutorials	Half-Day Tutorials 2:30 PM Break					
TRACKS:	Testing CoE	Test Design	Agile Methods	People/Teams	Mobile Applications	
1:00 PM - 4:30 PM	Building a Successful Testing Center of Excellence	Crash Course in Test Design Methods	A Test Leadership Guide to Going Agile	Coaching as a Two Way Relationship	The Mobile App Testing Challenge: Everything You Need to Know	
Instructor:	James Campbell, Tulkita Technologies	Peter Zimmerer, Siemens AG	Robert Galen, RGCG, LLC	Johanna Rothman, Rothman Consulting Group, Inc.	Doron Reuveni, uTest	
Two-Day Workshop and Classes 10 AM Break, 2:30 PM Break						
8:30 AM - 4:30 PM	Manager's Solutions Workshop			CSTE Prep Class	CSQA Prep Class	
Instructor:	Nancy Kastl and Tom Ticknor			Neil Price-Jones	Barbara Merwin	



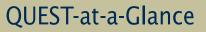


Wednesday, Ap	oril 6, 2011							
7:00 AM - 8:15 AM	Registration & Breakfast							
8:15 AM - 8:30 AM	Opening Remarks & Anno	uncements						
	Tom Ticknor, Chief Operating Officer, QAI Global Institute Nancy Kastl, QUEST Conference Chairperson							
8:30 AM - 9:25 AM	Keynote Address							
	Cloud Computing: New R Anders Vinberg, Microsoft	ealities and Perspectives fo	or Quality					
9:25 AM - 9:45 AM	Morning Refreshment Brea	ak						
9:45 AM - 10:45 AM	Concurrent Track Sessions							
TRACKS:	Management	Agile Methods	Test Planning / Design	Estimation	Regression Testing			
Industry Practices	Managing Software Quality Throughout the Lifecycle	Managing Software Quality Throughout the  Testing in the Enterprise Using Scrum  Reusable Test Design: Leveraging Your Test  Leveraging Your Test  Functional Metrics  Regression Testing  Regresses						
Speaker:	James Over, Software Engineering Institute	Robert Galen, RGCG, LLC	Robin Goldsmith, JD, Go Pro Management, Inc.	Thomas Cagley, David Consulting Group	Christopher Manuel, Wipro			
11:00 AM - 12:00 PM	Concurrent Track Sessions							
TRACKS:	Management	Agile Methods	Inspections	Measurement	SOA Testing			
Solutions Benchmarking	The Cost of Quality: A Reason for Built-In Quality	Scrum: A Disciplined Approach to Product Quality and Project Success	Static Testing: Getting Started, Getting Results, Getting Support	Quality Metrics for Automation Efforts	Establishing and Integrating SOA Testing			
Speaker:	Elaine Soat, Cartegraph Systems	Patricia Rotman, Siemens Industry, Inc.	Anne Hungate, Nationwide Insurance	Christopher Gervasi, Fidelity Investments	Beverly Edwards, Allstate Insurance			
12:00 PM - 1:00 PM	Special Interests Roundtables & Lunch							
1:00 PM - 2:00 PM	Concurrent Track Sessions							
TRACKS:	Management Agile Methods ALM Measurement Performance Testing							
Industry Practices	Optimizing Your Testing Center of Excellence							
Speaker:	James Campbell, Tulkita Technologies	Selena Delesie, Delesie Solutions	Pete DuPré, Micro Focus	Shaun Bradshaw, Zenergy Technologies	Shekhar Bhole, Scalar USA			
2:00 PM - 2:30 PM	Afternoon Refreshment Br	reak						
2:30 PM - 4:00 PM	Concurrent Track Sessions							
TRACKS:	Management	Agile Methods	ALM	Measurement	Risk-Based Testing			
Workshops	Selling Quality Using Marketing Models	Dealing with Defects on an Agile Team	Achieving Developer and Tester Collaboration	Deceptive Dangers of the Numbers Game	Risk-Based Testing on Steroids!			
Speaker:	Clyneice Chaney, MITRE	Janet Gregory, DragonFire, Inc.	Todd Mancini, Microsoft	Lynn McKee, Quality Perspectives	Todd Kuczaj, Accenture			
4:15 PM - 5:30 PM	Panel Discussion							
Speaker:	Software Assurance: Enabling Quality Assurance to Better Address Software Security and Resilience Moderator: Joe Jarzombek, Department of Homeland Security Panelists: Rafal Los, HP; Robert Martin, MITRE; Matt Moynahan, Veracode							
7:30 AM - 4:00 PM	Exhibitor EXPO and Books	tore						
9:45 AM - 4:00 PM	Coaching Sessions - Sign-up Required Registration Desk							
6:00 PM - 9:00 PM	00 PM - 9:00 PM Attendee Appreciation Night Dinner & Entertainment - Sponsored by <i>Microsoft</i>							

# QUEST-at-a-Glance



Thursday, April	7, 2011							
7:00 AM - 8:15 AM	Breakfast - Sponsored by Accenture							
8:15 AM - 8:30 AM	Announcements	Announcements						
	Nancy Kastl, QUEST Conference Chairperson							
8:30 AM - 9:25 AM	Keynote Address							
	Geography Matters: What Michael Mah, QSM Associat		out Offshoring, Agile Metho	ods, and the "Flat World"				
9:25 AM - 9:45 AM	Morning Refreshment Brea	ak						
9:45 AM - 10:45 AM	Concurrent Track Sessions							
TRACKS:	People / Teams	Security	Outsourcing	Mobile Testing	Test Data			
Industry Practices	It's the People It's Always the People	Top 25 Most Dangerous Application Security Weaknesses	Transforming Outsourcing Relationships	Best Practices for Testing Mobile Applications	Gaining Control of Your Test Data			
Speaker:	Johanna Rothman, Rothman Consulting Group, Inc.  Robert Martin, Stephanie Chace of Accenture  SQS Group Accenture  Stephanie Chace of Accenture  MITRE SQS Group Accenture Meridian Technology							
11:00 AM - 12:00 PM	Concurrent Track Sessions							
TRACKS:	People / Teams	Security	COTS Testing	Mobile Testing	Architecture Testing			
Solutions Benchmarking	Building an Effective Test Team	Case Study: Using Application Security Ratings to Manage Application Risk	Full Lifecycle Testing of Commercial off the Shelf (COTS) Software	Mobile Testing at Google: A Marriage of Idealism and Pragmatism	Architecture Testing: Wrongly Ignored			
Speaker:	Jim Trentadue, Gerdau AmeriSteel	Matt Moynahan, Veracode and Donna Durkin, Computershare	Saeid Vakili, Ontario Ministry of Education	Matthew Vaughan-Vail, Google, Inc.	Peter Zimmerer, Siemens AG			
12:00 PM - 1:00 PM	Lunch - Sponsored by <i>Wipro</i>							
1:00 PM - 2:00 PM	Concurrent Track Sessions							
TRACKS:	Organizational Change Requirements Test Automation Special Topic Exploratory Testing							
Industry Practices	Making a Difference as a Change Agent	As Requirements Go, So Goes the Project	Incorporating Unit Level Automation with Traditional Regression Testing	Top 10 Tech Trends: How They are Altering the Testing Landscape	Integrating Exploratory Testing with Discipline Testing			
Speaker:	Rebecca Staton-Reinstein, PhD, Advantage Leadership, Inc.	Charlene Gross, Software Engineering Institute	David Dang, Zenergy Technologies	Doron Reuveni, uTest	Timothy Korson, PhD, Qualsys Solutions			
2:00 PM - 2:30 PM	Afternoon Refreshment Br	eak						
2:30 PM - 4:00 PM	Concurrent Track Sessions							
TRACKS:	Organizational Change	Requirements	Test Automation	Solutions Forum	Exploratory Testing			
Workshops	Finding a Fit for Agile in Your Corporate Culture	Requirements Exploration with Tester Collaboration	Ten Tips When Tackling Test Automation	Open Information Sharing Dialogue	Exploratory on Purpose			
Speaker:	Jim York, FoxHedge Ltd.	Ellen Gottesdiener, EBG Consulting	Bob Crews, Checkpoint Technologies	Facilitated by: Nancy Kastl, Kaslen Group, Inc.	Jon Bach, eBay			
7:30 AM - 6:00 PM	Exhibitor EXPO and Books	tore						
9:45 AM - 4:00 PM	Coaching Sessions - Sign-up Required Registration Desk							
4:30 PM - 6:00 PM	Exhibitors Wine and Chees	e Reception and Raffle - Sp	onsored by EXPO Exhibitors					





Friday, April 8,	2011					
7:00 AM - 8:15 AM	Breakfast					
8:15 AM - 8:30 AM	Announcements					
	Nancy Kastl, QUEST Confere	ence Chairperson				
8:30 AM - 9:25 AM	Keynote Address					
	Exploring the 15 Factors of Peggy Leyden, Leyden Cons	9				
9:25 AM - 9:45 AM	Morning Refreshment Bre	ak				
9:45 AM - 10:45 AM	Concurrent Track Sessions					
TRACKS:	Process	Global Teams	Cloud / Virtualization	Special Topic	Certification Practice Exams	
Industry Practices	The Application of Lean IT Principles to Testing	Tackling Agile Testing with Global Distributed Teams	Virtuology: Testing in a Time Machine	Software Quality Assurance: A Critical Look at the State of the Art	CSTE/CSQA Practice Exam	
Speaker:	Phil Ruth and Michael Van Boven, Deloitte Consulting, LLP	Van Boven,  Darshan Dave, Yaron Kottler, Steven Rakitin, Software Ouglitest Ouglity Consulting Inc.				
11:00 AM - 12:00 PM	Concurrent Track Sessions					
TRACKS:	Process	SaaS Testing	Data Quality	Release Management	Certification Practice Exams	
Industry Practices	Improving Business Results with CMMI for Services and Development	SaaS Test Management: Control Your Costs with Pay as You Go	Parallel Data Testing: The Next Frontier of Quality Assurance	A Practical Approach to Determining Application Deployment Readiness	CSTE/CSQA Practice Exam	
Speaker:	Eileen Forrester, Software Engineering Institute	Pamela Smith, Sogeti			QAI Proctor	
12:00 PM - 1:00 PM	Lunch - QAI Grand Prize Drawing					
1:00 PM - 3:00 PM	Concurrent Track Sessions					
	Concurrent Track Sessions					
TRACKS:	Concurrent Track Sessions Process Effectiveness	People Effectiveness	Tools Effectiveness		Certification Practice Exams	
TRACKS: Workshop			Tools Effectiveness  Improving Productivity Through Automation Best Practices			



# QUEST-at-a-Glance



# **Special Interests Roundtables**

### Wednesday, April 6, during Lunch

Conference attendees have a wealth of knowledge and experience to share. That is why we are turning some of our circular tables at lunch into special interest group roundtable discussions. Look for the topic signs at these specially designated tables and join in the group discussion over lunch. This is also an excellent opportunity to connect with others who share your topic of interest and add them to your network of professional contacts. All you need to bring to the table are your questions and your experience.

No prior sign-up is required, but seating will be based on a first come - first serve basis.

# **Solutions Forum**

# Thursday, April 7, 2:30-4:00 Session

# **Open Information Sharing Dialogue**

Is there a topic of interest to you that is not being presented at QUEST this year? Then, the Solutions Forum is where you want to be. Attend the Solutions Forum to discuss the topic of your choice with QUEST speakers and your fellow QUEST practitioners. It's simple to participate. To place your topic on the list, post it to the Solutions Forum schedule by the QUEST registration desk on Wednesday or Thursday morning. Be sure to check out the other topics and consider combining your topic with any similar issues that may already have been posted. Next, vote for topics of interest to you. The topics selected for discussion in the Solutions Forum will be announced during Thursday's lunch. As the person who proposed the topic, you will introduce the discussion, describing the topic and explaining what they are interested in learning. If you feel that you can contribute to the topic or benefit from the discussion, please join the Forum. Everyone's ideas and productive debate are welcomed!

# **Coaching Sessions**

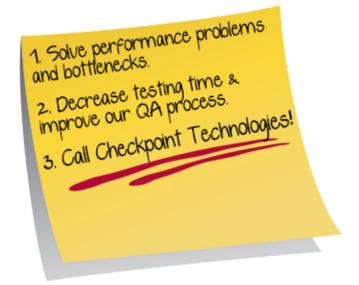
### Wednesday-Thursday based on availability

Have you ever heard an interesting idea or solution in a conference presentation and would have liked to discuss it further with the speaker? But, when you tried to talk to the speaker immediately at the end of the presentation, you found that the conference schedule just didn't allow enough time?

Included with the QUEST conference experience is the opportunity for you to meet one-on-one with conference speakers or the professional QAI instructors in an informal setting to discuss how to turn ideas into solutions that address your specific needs.

- Speakers will be available for free coaching sessions on the day of their conference presentation.
- Sign-up sheets with available speakers and times will be posted at the conference on Wednesday and Thursday.
- Sign-up during the conference is required to reserve your coaching session.

Sign-up at Registration Desk



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See us at QUEST Boston: April 4-8 in the Expo Hall.



**Group Discussions & Coaching** 



# Security and Requirements: How Software Quality Teams Can Become Information Security's Biggest Ally

# By Rafal Los

#### Hewiett-Packard

You simply can't test your applications *secure*. It's a concept well understood by seasoned information security professionals. Today, more than ever before, the volume of applications being churned out by a typical enterprise is reaching epic proportions. Despite all the negative press from security breaches, applications are being deployed with more security defects than ever before, even with all the available tools, published processes and best-practices. Why? Or more importantly, how can this trend be stopped and even reversed?

The secret lies in the way that software is built. The problem is that in many cases security teams are doing most of the work right before the application is released to production environments, long after the software has been built and tested. Often, security teams still find themselves testing applications even after they've gone into production only to find bugs that, realistically, no one can act on quickly if at all.

It doesn't have to be this way. What we're learning through building software security assurance (SSA) programs is that while every organization handles development, testing and release differently, every single development project still fundamentally buds from one basic tenet. Whether the development organization is holding steadfast to the waterfall development methodology, has jumped to agile, or is using its own "hybrid" thereof, at the core of every development cycle is one basic principle, the requirements. Requirements are the most basic building block of any application. Requirements are what drives the development process forward and, more importantly, links the business needs to an application's purpose. It is in these requirements that security should be embedded.

While there are different types of requirements, business and technical requirements, functional and non-functional, without requirements there is no reason to write code. Below, we look at how the overall security of an application can be greatly increased by simply injecting security upfront in the requirements management stage of the application lifecycle. While this is certainly no trivial task, the idea is to create a process where security teams are no longer struggling to "bolt on" security as an afterthought.

#### **Business Requirements**

The business will not say that security is unimportant to the organization, but security as a business requirement is undoubtedly a challenging conversation. There are, however, many other ways to see security as a business requirement, for example, compliance with industry and governmental regulations. A look at a few of the industry-mandated regulations such as the Payment Card Industry (PCI) and Health Insurance Portability and Accountability Act (HIPAA) shows they can be used to generate good business security requirements. Whether in pursuit of compliance or simply to lower risk, prioritizing security as a business requirement is a great way to achieve measurable impact.

A business requirement may read, "Meet PCI compliance regulations" for an application, expanding to many technical requirements for analysis. The key is to make business-level security requirements "high level" enough that they provide business value (i.e. the ability to process credit cards as a result of PCI compliance), but also provide value downstream as technical requirements.

#### **Technical Requirements**

Technical requirements are an expansion of the business requirement, in a way that can be executed within the framework of your testing organization. Meeting PCI requirements may be a business goal (business requirement) but there's no way to determine pass/fail status. Translating business requirements into more detailed, technical requirements takes some practice to be effective.

Typically each high-level business requirement breaks down into several technical requirements that can then be linked directly to tests, creating a many to one mapping between technical and business requirements. For example, several technical requirements map against PCI compliance as a business requirement. In a waterfall application development lifecycle, all requirements are laid out upfront, and hopefully don't change. In agile development, each high-level business requirement is typically addressed by an associated sprint.

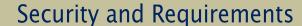
The key to having solid technical security requirements is two-fold. First, they must easily map into the business security requirements. Second, they must be actionable in an automated or semi-automated fashion using established tools and processes.

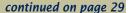
#### **Functional and Non-Functional Requirements**

Distinguishing between functional and non-functional security requirements is also crucial. While functional requirements may define features, non-functional requirements define concepts that development organizations must adhere to when writing code. Both of these are critical when it comes to understanding security, and creating software with minimal security defects.

For example, a non-functional requirement may be defined as follows: "No critical security defects as defined by information security policy." This non-functional requirement defines a concept. Conversely, a functional requirement may be defined as follows: "Implement sanitization method A on all input functions (data sources)." Both of these are technical requirements and can be tested against for a pass/fail status.

Striking the right balance between being high-level enough to make the requirement viable across the organization and technical enough to make it useful when mapping it to a testing strategy for pass/fail is critical. Well-defined security requirements can be an organization's most effective tool to produce higher quality applications. Having the ability to directly impact the motivation behind a development process ensures that security is not an afterthought.







# Quality Engineered Software and Testing Conference

#### (Article continued from page 28...)

#### Closing the Loop

One issue remains in developing security into the requirements management phase.

While it is inevitable that security defects will slip though the testing process despite everyone's best efforts it is crucial to "close the loop." Does the defect discovered at pre-production testing stop the application from going live? A risk decision produces one of three outcomes, fix, accept or defer the defect. If the defect is to be fixed, the application release halts while the defect is ultimately fixed, retested, and certified before the application goes live. If the defect is accepted, the project moves on knowing a risk-based decision was made, and the defect will not be fixed. It is when the defect is

deferred that requirements management is critical again.

Closing the loop here demonstrates the power of proper requirements management by feeding the deferred defects back into a future iteration of development. That defect is then formally assigned, measured and tracked to successful closure at an appropriate future release. Tracking and measuring defects in such a way is an achievement for maturing development organizations.

Building security into the requirements of an application is very powerful for a security professional's toolbox, and a core principle of an effective software quality organization. It is through reaching out to the QA organization and impacting requirements that information security can achieve measurable gains in software security assurance in the enterprise.

# **One-Stop-Shopping Bookstore**

As part of the QUEST total learning experience, you can browse the One-Stop-Shopping Bookstore and purchase books authored by renowned leaders in the software engineering, quality, and testing industries. The Bookstore will be open Wednesday and Thursday during the conference for your shopping convenience.

# Look for our speakers and instructors' books in print...

Thomas Cagley	Masterina Software	Proiect Manaaement:	Best Practices.	Tools and Techniau	ies (Co-author, 2010)

**Eileen Forrester** CMMI for Services: Guidelines for Superior Service (Lead Author, 2010)

**Bob Galen** Scrum Product Ownership - Balancing Value from the Inside Out (2009)

Software Endgames - Eliminating Defects, Controlling Change, and the Countdown to On-Time Deliver (2004)

**Robin Goldsmith** Discovering REAL Business Requirements for Software Project Success (2004)

Ellen Gottesdiener The Software Requirements Memory Jogger: A Pocket Guide to Help Software and Business Teams Development

and Manage Requirements (2005)

Requirements by Collaboration: Workshops for Defining User Needs (2002)

Janet Gregory 97 Things Every Programmer Should Know (Contributor, 2010)

Agile Testing: A Practical Guide for Testers and Agile Teams (Co-author, 2009)

**Charlene Gross** Incorporating Software Requirements into the System RFP: Survey of RFP Language for Software by Topic, v. 2.0

(Editor, Report, 2009)

Steven Rakitin Software Verification & Validation for Practitioners and Managers (2001)

Iohanna Rothman Manage Your Project Portfolio: Increase Your Capacity and Finish More Projects (2009)

Manage It! Your Guide to Modern, Pragmatic Project Management (2007)

Hiring the Best Knowledge Workers, Techies & Nerds; The Secrets and Science of Hiring Technical People (2005)

...and others

Rebecca Staton-Reinstein 30 Days to Building a Strategic Plan that Gets Results (2011)

> Get Great Requirements, The Hard Job of Making Software Work: Building the QA Function Step-by-Step (2009) Conventional Wisdom: How Today's Leaders Plan, Perform, and Progress Like the Founding Fathers (2009)

Success Planning: A 'How-To' Guide for Strategic Planning (2003)

Jim York The Way We See the Problem is the Problem (2008)

(see page 44 for additional articles and blogs)

**Bookstore** 



# **Cloud Computing: New Realities and Perspectives for Quality**

# Anders Vinberg Microsoft

## Wednesday, April 6 - 8:30 a.m.

How does cloud computing affect our thinking about software quality? How do we evaluate quality in this arena; how do we achieve it? And who among us is affected by this shift? After all, not very many of us are building something like Google, Facebook, or Hotmail.

We believe that the cloud has a profound effect, more because of business requirements than because of technology. Continual availability, scalability, and power efficiency are all key attributes of modern cloud-based systems. Scale, of course, changes everything. At a small scale we can simultaneously achieve these three elements, but at a large scale, we cannot and instead learn to deal with the problems. It is often more about Mean Time to Repair than about Mean Time to Failure. Even if you are operating at a moderate scale, today's business expectations are demanding, especially on availability. And it isn't just about faults; scheduled outages are not acceptable either. On the other hand, we can sometimes be very relaxed about things we traditionally take very seriously, such as accuracy of results!

It is not all bad news, though. The new cloud architectures help us achieve results that traditionally would be considered out of reach. We are

learning how to build applications specifically for the cloud, using cloud design patterns, cloud infrastructure, and fabric management systems to meet the new quality requirements.

- Understand the basic concepts of cloud computing
- Discover how cloud computing impacts our ideas about quality
- Explore the benefits that can be realized under this new architecture



Anders Vinberg is a Technical Fellow in the Management and Security Division of Microsoft, responsible for technical direction in management and protection of Microsoft's client, datacenter, and cloud experiences, and of the Windows Embedded Device business. His current areas of focus include virtualization, large-scale datacenters, and clients for the new mobile lifestyles. Prior to Microsoft, Vinberg worked for 14 years at Computer Associates as the principal architect of Unicenter, the company's flagship enterprise management system, and in many other product categories. He has also spent several years working in computer graphics. Vinberg grew up in Sweden, and holds a Master of Science in Applied Mathematics from the Royal Institute of Technology in Stockholm.

# Geography Matters: What Measurement Tells Us about Offshoring, Agile Methods, and the "Flat World"

# Michael Mah QSM Associates, Inc.

## Thursday, April 7 - 8:30 a.m.

Has the digital revolution really made it possible to do almost anything collaboratively, even with people separated by time and distance, thereby, making it feasible to construct the optimal project team from throughout the world? Or, are the decisions to split software development around the globe coming primarily from pressure by CFOs to cut costs? Countering and complimenting the multi-shoring trend is a powerful new movement that looks at the force of concentration, or the "clustering," of human creativity and talent, claiming that powerful innovation and economic gains result when smart and talented people locate closely to one another. This is the view the Nobel Prize winning economist Robert Lucas and the message of the agile revolution. Who is right?

To answer this question, Michael looks at what measurement data says about offshore and agile projects, and about teams separated by distance or co-located. Michael will present case studies of real companies and contrast the results from the two philosophies. What you find may challenge long-held beliefs about knowledge work, commoditization, and innovation. Get to know the benefits, preconditions, and fundamental principles of test design methods. This keynote will spark new ways of looking at measurement, management, and strategy in the self-

organizing and collaborative environment that will be required for software development in the next decade.

- Learn what Industry Data is revealing about software productivity and quality
- See how CFOs "get it wrong" in using offshoring to drive down costs
- Discover what data on agile is showing us about software quality and time-to-market



As managing partner at QSM Associates Inc., Michael Mah teaches, writes, and consults to technology companies on estimating and managing software projects, whether in-house, offshore, waterfall, or agile. He is the director of the Benchmarking Practice at the Cutter Consortium, a Boston-based IT think-tank, and served as past editor of the IT Metrics Strategies publication. With over 25 years of experience, Michael and his partners at QSM have derived productivity patterns for thousands of projects collected worldwide across engineering and business applications. His current work examines the time-pressure dynamic of teams, and its role in project success and failure. In addition to his background in physics and electrical engineering, Michael is a mediator specializing in dispute resolution for technology projects.

# **Keynote Presentations**



# **Exploring the 15 Factors of High Level Wellness**

#### Peggy Leyden

Leyden Consulting Associates, Inc.

Friday, April 8 - 8:30 a.m.

Our society is addicted to activity and multi-tasking. People are trying hard to be efficient. But, how often do we stop and really explore what is RIGHT with our lives? Do we know what contributes to the possibility of optimum living? In this dynamic keynote address, Peggy will discuss a body of research that focuses on fifteen factors contributing to excellence and high level wellness. A few of these factors are fulfilling relationships, physical prowess, positive self-esteem, goal accomplishment, and work satisfaction. Peggy will explain how these factors can be defined in our own lives and discuss creative ideas on how to focus and enhance these elements in the midst of a crazy work schedule. Something she herself is committed to doing!

These 15 factors require that we re-evaluate occasionally as life continues to move at a faster and faster pace. Attend this keynote and receive your own wellness appraisal. Caution: you may be at risk for higher health, happiness, and satisfactory living!

- Take the What's Right with Your Life Wellness Appraisal
- Discover the 15 Factors and understand key strategies for improving in each area
- Embrace the challenge of a personal action plan and contract for implementation

Clients describe Peggy Leyden as the ultimate professional. Her corporate experience,



combined with her work as an independent consultant, has provided the skills and business acumen necessary to connect with people throughout all levels of the organization. She is passionate about helping clients, both organizations and individuals develop skills that enable them to achieve their goals. They value her engaging style as well as her expertise in leadership, change management, organizational development, and team building.



"Quality is never an accident,
it is always the result of high intention,
sincere effort, intelligent direction and
skillful execution; it represents the wise
choice of many alternatives"

# Let's begin the journey ...

#### IMPROVE THE ROLOF YOUR TECHNOLOGY INVESTMENT BY:

✓ Accelerating time to value ✓ Reducing total cost of ownership ✓ Mitigating implementation and technology risks

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**Keynote Presentations** 



# **Software Assurance:**

# **Enabling Quality Assurance to Better Address Software Security and Resilience**

# Wednesday, April 6

# Wednesday - 4:15 PM - 5:30 PM

With today's global IT software supply chain, project management, software, and systems engineering processes must explicitly address security risks posed by exploitable software. Traditionally, these disciplines have not clearly and directly focused on software security risks that can be passed from projects into the organization. Software security assurance processes and practices span development and acquisition and can be used to enhance project management and quality assurance activities. The panel will address the critical need for adherence to the practices, guidelines, rules, and principles used to build security and resilience into every phase of the software lifecycle.

- Learn about The Software Assurance Forum, co-sponsored by the Department of Homeland Security, Department of Defense (DoD), and the National Institute for Standards and Technology (NIST).
- Discover how through the use of security-related standards, the qualification and certification of software products can now include assertions about security and resiliency.
- Hear about free resources that are available to assist in managing outsourcing, procurement, and development activities to better focus on security and resiliency.



National Cyber Security Division, Department of Home-

### About the moderator...

land Security

In his role as Director for Software Assurance, Joe Jarzombek leads government interagency public/private collaboration efforts with industry, academia, and standards organizations to shift the security paradigm away from patch management by addressing security needs in work force education and training, more comprehensive diagnostic capabilities, software security automation, and security-enhanced development and acquisition practices. Joe served in the U.S. Air Force as a Lieutenant Colonel in program management. After retiring from the Air Force, he worked in the cyber security industry as vice president for product and process engineering. Joe also served in two software-related positions within the Office of the Secretary of Defense prior to accepting his current DHS position. In his role as Director of Software Assurance, Joe addresses DHS Cyber Security initiatives focused on mitigating risks attributable to exploitable software and how public/private collaboration is necessary to improve cyber security. Joe speaks to the relevance of software security assurance in reducing organizational risk exposure.



Rafal Los Hewlett-Packard

# About the panelist...

Rafal Los is the Web Application Security Evangelist for the HP Software & Solutions business at Hewlett-Packard. Rafal is responsible for bridging gaps between security technologies

and business needs. He also focuses on demonstrating business value from risk reduction through measurable gains in enterprise web application security solutions on behalf of the HP Application Security Center group. He has spent over 10 years in various facets of information security and data protection, building programs at companies ranging from startups to Fortune 50 enterprises. Rafal is a frequent speaker at security conferences and quality events. He contributes regularly to organizations such as the Open Web Application Security Project (OWASP) and others promoting education, openness and standards.



Robert Martin MITRE

# About the panelist...

Robert Martin is a Principal Engineer at MITRE, a company that works in partnership with the government to address issues of critical national importance. For the past 18 years,

Robert's efforts have focused on the interplay of risk management, cyber security, and quality assessment. The majority of this time has been spent working on the CVE, OVAL, CAPEC and CWE security standards initiatives in addition to basic quality measurement and management. Robert is a frequent speaker on the various security and quality issues surrounding information technology systems and has published numerous papers on these topics. Robert holds a BS and MS in Electrical Engineering, and an MBA from Babson College.



Matt Moynahan Veracode

#### About the panelist...

Matt Moynahan is chief executive officer of Veracode. Under his leadership, Veracode is providing the world's first SaaSbased application risk management solution empowering

organizations to implement a global, ubiquitous risk management strategy from the C-level suite to the developer's desktop. Matt's career has spanned the spectrum of application security roles, from his early experience in capital markets at Goldman Sachs, to leading the \$2 billion Consumer Products and Solutions division at Symantec. Today, Matt is recognized as an emerging leader in the technology industry and was recently named an Ernst & Young Entrepreneur of the Year award finalist.

# **Panel Discussion**



# Wednesday, April 6 - MORNING

#### Managing Software Quality Throughout the Lifecycle

James Over, Software Engineering Institute

Track 1: 9:45 - 10:45

"How do you know that you've found the last defect in system test? You never find the first one." It has been more than 20 years since IBM's Dr. Harlan Mills provided this personal insight into quality management and testing. Yet, the software industry still relies heavily on testing to improve the quality of its product. Dr. Mills' message was simple, if you want a quality product out of test; you have to put a quality product into test. This presentation will address this concept introducing lifecycle quality management principles, methods, and metrics that have been proven effective on software development and enhancement projects in many domains and settings. Starting with software project planning, Jim will describe metrics and benchmarks that can be used to evaluate plans, software components, and software processes to economically manage quality throughout the lifecycle.

#### Testing in the Enterprise Using Scrum

Robert Galen, RGCG, LLC

Track 2: 9:45 - 10:45

Scrum has become one of the most used Agile Methodologies for scaling agility toward larger projects and teams with its hierarchical Scrum-of-Scrums model. However, there are challenges within the approach. One of the more critical problems is guiding the testing effort as project size and complexity increases, particularly for enterprise level projects. In this presentation, Bob will show you how to face some of these scaled testing challenges including handling legacy and non-green field projects, managing distributed testing, integration testing of large-scale systems, coordinating with multiple product owners, and successfully marrying traditional testing expectations and techniques with those of the agile teams. Additionally, you'll explore strategies for traditional testers to successfully integrate their skills and experience into their agile teams to make a high quality impact.

#### Reusable Test Designs: Leverage Your Test Case Effort

Robin F. Goldsmith, JD, Go Pro Management, Inc.

Track 3: 9:45 - 10:45

Would you like to be an instant testing expert, able to start testing effectively in new situations without delay? And would you like to spend more of your time running tests and less of your time creating the tests? Reusable test designs are a little-known but powerful test planning/ design tool that make it possible for you to run more effective test cases in less time. This presentation shows you how to apply a systematic structured Proactive approach that first enables you to design much more thorough tests than traditional methods. Then, you'll discover how to convert your test designs into reusable test designs that you can apply instantly in new situations. You'll develop several reusable test designs and be ready to add more to your toolkit back on the job.

### **Agile Estimation Using Functional Metrics**

Thomas Cagley, David Consulting Group

Estimation is a lightning rod for conflicts between agile and process driven methodologies. However, times are changing and agile is maturing. Part of the process of maturation is the incorporation of best practices from other methods and frameworks. In this presentation, Tom will explain how functional metrics allow you to incorporate additional process discipline into the estimation processes typically used by agile teams. Join Tom and review current approaches to agile estimation, learn an approach to incorporate functional metrics into agile estimation, and understand why process discipline in estimation is important to gauge improvement. This process can be used to estimate whole projects or specific components.

#### **Regression Testing Regresses**

Christopher Manuel, Wipro

As organizations aspire to enter the world of the cloud in addition to embarking upon virtualization, all the while remaining rooted in their "alive-and-well" legacy technology, new models of support and maintenance are emerging. This is creating the need for new regression testing models, frameworks and processes that address the challenges around maintenance and reusability, better application of test automation, and more mature metrics to measure success. In this presentation, Christopher will focus on the challenges that organizations face both in defining the right regression testing strategy and implementing that strategy without impacting their ongoing release schedules. He will discuss best practices around strategy and tactical implementation as well as the newest regression testing methods that organizations are employing along with creative measures to gauge success. The evolution in test automation tool sets that support regression testing will also be covered. Finally, Christopher will review a case study of an organization that has managed to actively adapt their regression test strategy to better support their technical transformation.

# Wednesday, April 6 - AFTERNOON

#### **Optimizing Your Testing Center of Excellence**

James Campbell, Tulkita Technologies

Track 1: 1:00 - 2:00

Testing Centers of Excellence are becoming more and more common today. However, do you know how to take your TCoE from average to world-class? In this session, James will discuss the winning formula for taking your TCoE to the next level. Understand how to sell and grow an enterprise TCoE. To "up your game," it is important to remain relevant to the business and show ongoing value and efficiency savings. Learn to examine the business aspects related to running a TCoE and how to best optimize operations. James will discuss the value levers and cost savings that can be measured by the TCoE. He will talk about the 'extra' non-testing activities required to be implemented to motivate staff, and empower rapid growth and maturity. Finally, he will reveal how to remain competitive and relevant to the organization to meet changing business priorities.

#### Let Go of the Reins: Management in an Agile Organization

Selena Delesie, Delesie Solutions

Track 2: 1:00 - 2:00

Your organization has gone agile, and you are a test manager. You'll find that there is little, if any, information about how a test manager fits into an agile organization. Some people may even tell you that your role is obsolete! The good news is that a truly agile, empowered, self-directed, collaborative, and silo-eradicated organization takes a long time to form, which means that many agile organizations benefit in having managers as they evolve. To thrive as an agile manager though, your role and responsibilities need to change as the organization does. You must learn to be a coach, removing obstacles and promoting communication. Attend this session to learn how to develop as your organization goes agile and how to ensure you consistently add value for your company. You will leave with insights, techniques, and approaches you can readily apply when you return to work, so that you thrive as an agile

#### Modernizing QA: The Relentless Pursuit of Business Alignment Pete DuPré, Micro Focus

Track 3: 1:00 - 2:00

Your business is built on software. It is critical that you deliver. The reality is, however, that 68% of software projects struggle. They are late, over-budget, or result in missed expectations. Sadly, 40% of development effort spend is typically wasted on rework. Why is this tolerated? Quality practices are partly to blame. Business expectations are often overlooked, resulting in development and test plans that are out of alignment with business needs. Change is often poorly managed, impeding your business agility. Testing comes late in the lifecycle; often vital tests are sacrificed in the rush to go live. The net effect is that millions of dollars are wasted developing software that's simply not fit. It's time to move beyond this outdated practice. Join us as we discuss emerging concepts and benefits of a modernized QA approach managing quality from the inception of the project, instead of at the end of the lifecycle.

#### Managing with Metrics: The Saga of a Test Effort

Shaun Bradshaw, Zenergy Technologies

Track 4: 1:00 - 2:00

Some consider test metrics a thorn in the side of software development and testing, but when used properly, they provide valuable insights into what occurs during projects and what strategic and tactical adjustments must be made on a daily basis. This presentation describes how a small set of test metrics were used to successfully manage a major test acceptance effort at the conclusion of a two and half year ERP implementation. Attendees will learn how key metrics drove test management decisions and how these same metrics can benefit their organizations. In relaying the story, Shaun will lead a discussion of the background, planning, effort, and results, all from the point of view of what the metrics revealed and how the management of the entire project effort was altered as a result.

#### Performance Engineering: Strategy and Delivery

Shekhar Bhole, Scalar USA, Inc.

Track 5: 1:00 - 2:00

With complex environments and distributed system structures it is very difficult to proactively predict and diagnose performance issues. Most organizations purchase performance tools with an understanding that they will pinpoint all the potential problems. But, in reality, a performance tool is just a medium to push the desired load. The real solution to this problem is the strategy and processes surrounding the area of performance. In his presentation, Shekhar will provide information on how performance testing should be driven to achieve maximum maturity and ROI in shortest amount of time. He will explain a step by step approach for organizations to adapt performance methodology and toolsets, and to standardize and improve their existing performance strategy and delivery. Finally, Shekhar will discuss how the development of centralized expertise in an organization can save money by managing performance initiatives in a truly cost effective manner.

**Industry Practices Sessions** 



### Thursday, April 7 - MORNING

#### It's the People It's Always the People

Johanna Rothman, Rothman Consulting Group, Inc.

Track 1: 9:45 - 10:45

Why do we insist on calling people "resources?" If software projects were a factory, people would be fungible, interchangeable resources just like desks and computers. But software is creative work. That means we need to manage people as if they are human, not as tasks or resources. Join Johanna and learn how to find the right people by recognizing candidates who fit your culture. Understand how to hire using team consensus and how to prevent one person from holding your hiring process hostage. Johanna will explain what makes a team great, interpersonal skills. Great managers model those skills and value them by rewarding people who use those skills to help the team succeed. Explore how to empower the team, including protecting it from bad influences, making sure the team has what they need, and helping people learn to be accountable to each other, not to their manager. People, working in teams, make projects succeed. Learn how you can help them.

#### Top 25 Most Dangerous Application Security Weaknesses

Robert Martin, MITRE

Track 2: 9:45 - 10:45

Robert's talk will focus on the 2010 update to the SANS/CWE list of the Top 25 Most Dangerous Software Errors, which is the "minimal due-care standard" for developing secure applications in many large enterprises. It is used by the State of New York and The Depository Trust & Clearing Corporation to mandate what application security must be addressed in procurement contracts. The Top 25 CWE list can and should be a basis for creating automated tests and testing tools. Common themes in each of the 25 errors can be used to craft lessons to apply to future development activities. Applying techniques mentioned throughout the 25 issues can aid development and testing teams to create more secure software and reduce downstream effects on companies and customers alike. No matter your project role, your mandate is clear, safeguard your applications and make sure your team has avoided the Top 25 Most Dangerous Software Errors.

#### **Transforming Outsourcing Relationships**

Yann Gloaquen, SQS Group

Track 3: 9:45 - 10:45

When testing functions are outsourced, the various partners and stakeholders often perceive success differently. Typically, the outsource provider believes its performance is good, testers in the development organization are ambivalent, and the parent business is unhappy. In this presentation, Yann will discuss common engagement challenges often resulting from inadequate governance models where measurements drive unwanted behavior. He will cover ways of turning around such engagements, creating value generating partnerships for all stakeholders. Yann will explain how to set up governance models to ensure no gaps between expected and actual service levels and outcomes. Finally, he will outline what is shaping up to be the next generation of governance model as outsourcing matures and organizations seek innovation and value-add from their outsourcing partner.

#### **Best Practices for Testing Mobile Applications**

Mike Ennis, Accenture

Track 4: 9:45 - 10:45

With the emergence of the smart phone mobile application era, a whole new set of challenges are converging on existing test teams. Along with access to unlimited information comes a dilemma in determining how best to test the thousands of applications across the many devices, networks, carriers, and languages they support. In this presentation, Mike will guide you to an understanding of the key methods for tackling this issue. You will learn the major differences between testing mobile applications versus web applications and why mobile testing is so challenging. You will leave this session with important techniques for customizing your own mobile testing strategy.

#### Gaining Control of Your Test Data

Stephanie Chace and Daren Ayers, Meridian Technologies

Track 5: 9:45 - 10:45

As a software testing professional, developing and managing your test data as soon as possible within your project lifecycle will improve the quality of your product and lower the cost of producing that product. Why? Well managed and effective test data will ensure you overcome failures and setbacks caused by data that is ineffective for your testing. Join Stephanie and Daren as they use real world project examples to show you the impact of poor data choices. They will review the fundamental issues affecting the ability to make good data choices and help you understand how to choose the right data in the right amounts ensuring robust coverage. They will address data integrity issues and discuss how to handle test data complexity including how to create and maintain effective data. Finally, they will cover automation of the test data management process.

## Thursday, April 7 - AFTERNOON

#### Making a Difference as a Change Agent

Rebecca Staton-Reinstein, PhD, Advantage Leadership, Inc.

Track 1: 1:00 - 2:00

Most attempts at organizational change fail since the old culture is so strong that it generally overcomes the new initiative. Not to mention that the very thought of adding the burden of change is often just too much...it's the last straw. Often the change agent, the person trying to drive or facilitate the change, gets 'destroyed' in the process. These results are not inevitable, however. There are some proven, practical practices you can apply whether trying to change a process or move some portion of the organization in a different direction. Learn successful techniques, deadly sins, and how to avoid making classic mistakes. Learn to take a strategic, rather than tactical, approach to change as you develop and deploy a plan. Learn why introspection, changing yourself, and a little bit of humor are key ingredients to getting change to overcome the odds and stick. Walk away with the resources you need to make a difference.

#### As Requirements Go, So Goes the Project

Charlene Gross, Software Engineering Institute

Track 2: 1:00 - 2:00

Nowhere is the opportunity greater or the cost of a project more likely to be impacted than at the beginning, when requirements are gathered, refined, and translated into specifications. This area is well-recognized as the point at which costly and damaging defects are introduced. Unfortunately, when the subject of requirements arises, it is usually met with a shrug and some statement to the effect that requirements are always a problem. This session attacks the giant shrug in three ways: through discussion of facts and figures that can "sell" the need for better requirements formulation, through a mapping of classical requirements categories to CMMI terms for a better understanding of how CMMI applies, and through a discussion of the important elements of sound requirements engineering. Charlene will also discuss the rights of the customer and the analyst gathering the requirements.

# Incorporating Unit Level Automation with Traditional Regression Testing

David Dang, Zenergy Technologies

Track 3: 1:00 - 2:0

Quality assurance groups have recognized the need to implement regression test automation to effectively and efficiently test applications. Most of the test automation tools used by QA are full-feature tools that require licensing fees. On the other hand, development groups need a lightweight test automation tool to help them expedite unit testing. Most of these lightweight test automation tools come with their own programming language or are open-source. Meeting both these needs with an integrated solution will provide benefits to both groups. The challenge then is to identify solutions to bridge test automation between the needs of the development group and the QA group. In his presentation, David will address two potential solutions to this problem.

# Top 10 Tech Trends: How They are Altering the Testing Landscape Doron Reuveni. uTest

Doron Keuveni, u ies

Track 4: 1:00 - 2:00

New and emerging technologies like mobile apps, 4G, cloud computing, HTML5, and NoSQL are making big headlines. These technological innovations are allowing sensitive data to be accessed through the web and on mobile devices more than ever before. With so much critical data flowing to smartphones and tablets, there is immense pressure to ensure that apps are reliable, scalable, private, and secure. This evolution, or in some cases, revolution of technologies and user behavior dramatically impacts those who are responsible for developing and testing applications. The ways web and mobile apps are designed, developed and delivered are changing dramatically, and therefore the ways these apps are being tested are being taxed and stretched to the breaking point. Using real-world examples, Doron Reuveni identifies the top ten technology trends that have transformed the software industry and outlines what these new technologies mean for web and mobile testers.

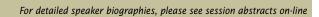
#### Integrating Exploratory Testing with Discipline Testing

Tim Korson, PhD, Qualsys Solutions

Track 5: 1:00 - 2:00

Traditional approaches to testing are organized around the distinct phases of test planning, test design, and test execution performed as sequential activities. Exploratory testing is the interleaving of test planning, test design, and test execution in real time taking learning into account. In exploratory testing, the results of one test case often influence the design of the next test case. Exploratory testing is designed to minimize overhead spent on detailed test planning and design so as to maximize the time that responsible, intelligent, well trained, and engaged test professionals spend actually testing a system. However, exploratory testing is not ad hoc. A set of exploratory tests can be planned and designed. Coverage data can be reported. Join Tim and see how projects are best served by an appropriate blend of scripted and exploratory testing, as well as by having the right mix of manual and automated testing.

# **Industry Practices Sessions**





### Friday, April 8 - EARLY MORNING

#### The Application of Lean IT Principles to Testing

Phil Ruth and Michael Van Boven, Deloitte Consulting, LLP

Track 1: 9:45 - 10:45

Organizations today are rapidly changing their project delivery models, focusing on increasing speed to market to manage regulatory changes as well as to support new products and services. This has necessitated the need for a refined thinking of IT deployments and has resulted in Lean IT, a concept centered on improving efficiencies and reducing waste within IT organizations and processes. This session will examine how Lean IT is being applied in different industries. Phil and Michael will focus particularly on the application of Lean IT principles to testing including testing early, risk based testing, metrics and management, tools and automation, and focusing on the primary value stream. They will walk you through leading practices in Lean IT testing, the mindset shift required, and a real life case study of Lean IT.

### Tackling Agile Testing with Global and Distributed Teams

Darshan Dave, Syntel, Inc.

Track 2: 9:45 - 10:45

Agile methodologies are popular as they promise a faster life cycle and product realization. Testing in an agile environment is a challenging task, however, and adapting traditional methodologies and approaches to agile processes is not easy. One of the most important keys to success of any agile project is close collaboration between functional teams. This is especially true for testing teams as they are required to be embedded tightly into the scrum cycles. Darshan's presentation will discuss well defined test protocols and procedures that closely integrate testing within agile cycles and provide the flexibility of engaging virtual and global teams. He will also discuss changing roles, responsibilities, communication models, process, and operating framework for testing within an agile world. From this talk, you will gain a clear understanding of testing techniques required for different agile methods and be able to create a framework for successfully tackling agile testing projects with global teams.

#### Virtuology: Testing in a Time Machine

Yaron Kottler, QualiTest

Track 3: 9:45 - 10:45

What if you could go back in time to the exact moment when a bug occurred? Or, even better, just before it occurred, yet empowered with the knowledge that the bug exists and the ability to continue testing different scenarios. This presentation is not about the known efficiencies virtualization and cloud computing bring to QA and testing. It is about "Virtuology" - using virtualization tools & methodologies to transform the way we test. Recent advances in virtualization technology have created the ability to record and replay complete testing sessions. This includes everything from OS and application conditions to network traffic and the actual lines of code leading to those hard to reproduce bugs. You now have a time machine that enables testers and developers to see precisely what went wrong with the software, including the ability to rewind, pause, and fast forward. Regardless the testing methodologies you practice, virtuology can significantly improve your testing process.

#### Software Quality Assurance: A Critical Look at the State of the Art Steve Rakitin, Software Quality Consulting, Inc.

Track 4: 9:45 - 10:45

Software Quality Assurance, as a profession, has been in existence for about 50 years. In this talk. Steve will look back at the history and evolution of the profession over the past five decades. You'll see how SQA was born from the concept of Independent Verification and Validation. Steve will discuss some examples of software quality issues first raised at the 1968 NATO Software Engineering Conference where the term "software engineering" was coined. Oddly enough, companies today, some 40 years later, are struggling with some of the same quality concerns raised back in 1968. Then, Steve will look ahead to the future to see how the profession is likely to change and what these changes may mean to those of us who are SQA practitioners. You'll hear about methods such as assurance cases, virtual test labs, and other cutting edge SQA techniques that will add more value to the work SQA professionals perform now and into the future.

### Friday, April 8 - LATE MORNING

#### Improving Business Results with CMMI for Services and Development Eileen Forrester, Software Engineering Institute

Track 1: 11:00 - 12:00

Both the CMMI for Services and the CMMI for Development are reference models for process improvement meant to enhance the business performance of organizations. CMMI-SVC is the newer model and, in early use, is producing promising results reported as increased income and capacity to deliver. Among the surprises in CMMI-SVC is its use in development settings. CMMI-DEV has a longer history and recent data shows the quality and business results that capable organizations get, such as defect reduction, on-time performance, and decreased costs. Many organizations perform both development and service missions, and these two modes together cover the entire mission landscape. With the new versions of both models published in October of 2010, ties among business goals, performance, and process improvement are even stronger. In this session, the lead author of CMMI-SVC will overview both models, compare them, describe the quality results already achieved by some organizations, and discuss best practices to

# SaaS Test Management: Control Your Costs with Pay as You Go

Pamela Smith, Sogeti

Track 2: 11:00 - 12:00

In an uncertain economy most IT organizations are looking for solutions that will allow them to reduce total cost of ownership and streamline their current processes without risking the overall quality. How do we as quality assurance and test leaders achieve this goal and still meet industry regulations such as Sarbanes Oxley and ISO? This presentation will introduce a flexible low cost on-demand testing delivery model that will allow you to get to market faster, deliver higher quality applications, and eliminate long term vendor contracts. Join Pamela as she introduces you to Software as a Service (SaaS) test management. She will explain how the SaaS delivery model for testing works and outline the benefits of this approach. Most importantly, you will explore whether your own organization is one that would benefit from this model.

#### Parallel Data Testing: The Next Frontier of Quality Assurance Daniel Dopp, Infogix

Track 3: 11:00 - 12:00

Several methods exist for functional and performance testing (F&PT) of software systems and processes. However, fewer options are available to ensure the accuracy, consistency, and reliability of the data itself. Unlike F&PT, data testing cannot be performed prior to the data conversion or movement. Post conversion data testing is costly due to the time and effort it takes to correct an issue and retest new results. Therefore, Parallel Data Testing (PDT) is the most efficient and effective approach to ensure quality. This presentation will cover PDT concepts and framework, common PDT controls in addition to a case study where you can participate in a facilitated discussion of the appropriate PDT required for the case.

#### A Practical Approach to Determining Application Deployment Readiness

Peter Varhol, Seapine Software

Track 4: 11:00 - 12:00

When do you ship an application under development? The question seems simple; you ship it when it's complete. But, that begs the question of what it means to be complete. There are many possible definitions of complete and it is critical that teams and users agree on a definition before any work is done. However, leading up to deployment, the team may have to make difficult decisions on tradeoffs necessary to ensure the application meets users' needs. In this presentation, Peter will provide practical examples of different approaches to determining when an application is ready to ship. He will also discuss how to create objective measures of completeness and how to collect data and track progress toward that end. He will explain how testers and quality professionals should work with application stakeholders to contribute to both the definition and measurement that determines if an application is fit for its intended

**Industry Practices Sessions** 



### Wednesday, April 6 - MORNING

#### The Cost of Quality: A Reason for Built-In Quality

Elaine Soat, Cartegraph Systems

Track 1: 11:00 - 12:00

Software companies are constantly enhancing their development processes to maximize resources, produce more products, and maintain a high level of quality. Too often, however, companies do not think about quality holistically. Instead, they try to "test-in" quality at the end of the development lifecycle. How much does it cost to "test-in" quality instead of driving quality with test first design? Join Elaine as she discusses the differences in cost between "testing-in" quality vs. relating testing to the complete software delivery life cycle. You will gain an understanding of the true costs of quality including the fallacy that quality costs are greater in a quality focused project. Most importantly, you will learn how to convince an organization that quality should be 'built-in'" to the software development life cycle and not "tested-in" at the end.

# Scrum: A Disciplined Approach to Product Quality and Project Success Patricia Rotman, Siemens Industry, Inc.

Track 2: 11:00 - 12:00

Product development is a complex process that requires more than clever, driven people. Many software development efforts are riddled with risks that cause massive schedule slippage, poor quality, and sometimes complete project derailment. If done properly, Scrum can provide a framework for managing this complex and challenging work, while releasing the constraints of more traditional approaches. However, many things must change. In this session we'll discuss how Scrum can be used to address the complexities and risks inherent in any software project. We will look at some real-world examples of Scrum projects that have been delivered on-time, on-budget, with exceptional quality, all while achieving a CMMI level 3 process standard. Join Patricia and learn about the discipline involved in a successful Scrum project and how the QA role changes to become even more dynamic and value-add.

# Static Testing: Getting Started, Getting Results, Getting Support

Anne Hungate, Nationwide Insurance

Track 3: 11:00 - 12:00

Cost soars when defects are not discovered until system testing, or worse, production. Inspections can drive down delivery timelines, drive out defects, and align business and IT expectations. The benefits of static testing are known and documented, so why is this the first activity dropped when teams feel pressed to meet schedule and cost constraints? In this presentation, Anne will share the story of one project team that embraced static testing, stayed with it, and realized the results. She will share their dramatic outcome, evidence of static testing value. Their success marked the beginning of a quality journey to institutionalize inspections through project and production support work. Anne will offer practical steps to overcoming organizational and cultural barriers that keep teams from realizing the benefits of inspections. She will identify common pitfalls and give suggestions to go from isolated implementation to expected practice.

### **Quality Metrics for Automation Efforts**

Christopher Gervasi, Fidelity Investments

Track 4: 11:00 - 12:00

Many see automated test efforts as an extension of their existing program with the added opportunity of return on investment. However, automated test frameworks can provide far greater insight into overall quality than is imagined. Expanding automated suites across the test cycles and their corresponding environments will drive early defect detection and help identify production like scenarios. Christopher will discuss some techniques to accomplish this. The operational model for environment management can leverage automated testing suites to reduce environment downtime, further increasing return on investment. Finally, well designed automated frameworks can replay production data to help predict the unpredictable customer. This capability is instrumental in understanding improvement opportunities. Christopher will also look at change management metrics and defect containment rates. This session will review best practices of automation design and alignment, and the operational components of quality.

# Establishing and Integrating Service Oriented Architecture Testing Beverly Edwards, Allstate Insurance Company

Track 5: 11:00 - 12:00

More and more enterprises are embarking on the SOA journey. This journey involves huge investments but the results are promising. The testing phase, however, becomes very challenging unless planned for early in the project. Traditional testing tools, strategies, or skill sets may not suffice for the testing of an SOA implementation which includes functional, performance, interoperability, governance, and vulnerability testing. In her presentation, Beverly will detail how Allstate Financial Technology and Infosys jointly set up an SOA testing practice that aligned with the existing testing COE. She will explain how technology, tools, and skill set demands were found to be different than the traditional team and how the SOA testing team evolved. The challenges, learnings, and some best practices will also be discussed including the different test strategies used and how the reusability factor was leveraged.

## Thursday, April 7 - MORNING

#### **Building an Effective Test Team**

Jim Trentadue, Gerdau AmeriSteel

Track 1: 11:00 - 12:00

Bringing together a testing organization in an existing IT department has many challenges. How will you handle delivery expectations, how will you leverage resources and build the necessary skill set, and how will you integrate the team with external projects? In this session, Jim will explain how to organize the total effort into logical containers such as assessment, standardization, investment, and execution. He will discuss how to establish a common testing methodology for project teams that is repeatable and prepare documented business cases and ROI for initiatives requiring time or cost. Finally, he will cover how to build a roadmap enabling IT to see immediate gains from an overall process standpoint and to envision the future model of the testing department.

# Case Study: Using Application Security Ratings to Manage Application Risk

Matt Moynahan, Veracode and Donna Durkin, Computershare

Track 2: 11:00 - 12:00

The application security policy is a critical component of an organization's overall information management architecture. Whether you are developing software internally or leveraging outsourced code, open source, or third-party libraries, it is critical to understand the security posture of your code across the entire software supply chain. This case study features Computershare's model of leveraging an application security rating system not only to verify, but also to demonstrate software assurance across the software supply chain. In this presentation, Matt and Donna will explain how to move from ad hoc testing to a true application risk management policy initiative.

# Full Lifecycle Testing of Commercial off the Shelf (COTS) Software Saeid Vakili, Ontario Ministry of Education

Track 3: 11:00 - 12:00

In today's competitive market, commercial off the shelf (COTS) systems are becoming a popular alternative to in-house development for businesses. The use of COTS has been mandated across many government and business programs as such products can offer significant savings in procurement, development, testing, and maintenance. This presentation is based on a real world example of testing a large enterprise COTS application system within the Ontario Ministry of Training, Colleges and Universities. Saeid will provide general QA and testing best practices for COTS applications as well as the approach that a QA team should take across the entire project lifecycle. He will explain practical "How To's" of testing including, test planning, design, test types, automated, and performance testing all backed up by real examples. Saeid will also describe the similarities and differences between testing COTS and in-house developed application systems, and will show you the challenges that you are facing when testing COTS.

# Mobile Testing at Google: A Marriage of Idealism and Pragmatism Matthew Vaughan-Vail, Google, Inc.

Track 4: 11:00 - 12:00

The prevalence of mobile devices has forced application developers, particularly those in Web development, to expand their efforts into mobile development. Google is very much in the same situation. In addition to developing a Web-accessible application, they have to consider mobile browsers, as well as native applications on different flavors of operating systems. Since Goggle is developing one of the most popular mobile operating systems, Android, they have a unique perspective on mobile testing. This presentation will give an introduction to testing at Google and mobile testing in particular. Matt will frame his talk by discussing Goggle's general testing philosophy and then discuss how these principles are applied to mobile testing initiatives. Matt will discuss various initiatives that have been attempted, both past and present, and share lessons learned and best practices.

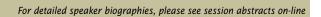
### **Architecture Testing: Wrongly Ignored**

Peter Zimmerer, Siemens AG

Track 5: 11:00 - 12:00

State-of-the-art testing approaches typically include different testing levels such as reviews, unit testing, component testing, integration testing, system testing, and acceptance testing. There is also the common sense that typically unit testing is done by developers and system testing is done by professional independent testers. But, who is responsible to adequately test the architecture which is one of the key artifacts in developing and maintaining flexible, powerful, and sustainable products and systems? History has shown that too many project problems and failures are caused by deficiencies in the architecture. Furthermore, what does the term architecture testing mean and why is this term seldom used? To answer these questions, Peter describes what architecture testing is all about and explains a list of practices to implement it successfully. He offers practical advice on the required tasks and activities as well as the needed involvement, contributions, and responsibilities of software architects in the area of testing.

# Solutions Benchmarking Sessions





# Wednesday, April 6 - AFTERNOON

# Selling Quality: Using Marketing Models

Clyneice Chaney, MITRE

Track 1: 2:30 - 4:00

Quality is often an idea that is difficult to sell. Many business leaders have interesting, false, or incomplete perceptions regarding quality and the associated costs. Quality managers have been told that to get the "ear" of senior management they need to present information using terminology that senior management relates to such as "bottom line" or "strategic impact." Since marketing has a significant presence in business today, a question should be posed. Are there marketing models and approaches that could help quality managers sell quality more effectively? This presentation provides an overview of marketing and selling techniques including actual presentation examples geared toward selling quality. Use of these methods can help management see the alignment and criticality of quality to their business.

## Dealing With Defects on an Agile Team

Janet Gregory, DragonFire, Inc.

Track 2: 2:30 - 4:00

Software defects are annoyances for everyone. If your organization is like most and you have a large queue of defects waiting to be fixed, this session is for you. It's probably not realistic to think we'll get around to fixing all of these bugs, so we need to consider other approaches. lanet will facilitate this workshop to help you develop a strategy for how your team can address defects in an agile manner. The group will discuss alternatives to traditional bug reporting and how a shift in your team's mindset toward preventing bugs in the first place is critical.

#### Achieving Developer and Tester Collaboration

Todd Mancini, Microsoft

Track 3: 2:30 - 4:00

Despite outfitting both your development and test teams with the best tools available, are they still unable to work together in a reasonable manner? Are reported defects dismissed by the development team due to a lack of detailed, technical information? Has one of your developers ever told one of your testers, "Well, it works on my machine?" Are you unable to trace from a requirement down to both development and test? Have you struggled to build out and maintain a test environment, perhaps using virtualization, which serves the needs of both development and test? Attend this workshop and learn how the Microsoft Visual Studio 2010 family of tools can save you from this level of dysfunction and enable highly leveraged, collaborative developer and test teams across a wide range of platforms and technologies.

#### Deception Dangers of the Numbers Game

Lynn McKee, Quality Perspectives

Track 4: 2:30 - 4:00

Many of us have crafted numbers and proudly reported them as valuable insight on product quality. The drive to quantify and justify our projects through metrics is pervasive. Many stakeholders crave metrics in the hopes of simplifying their decision making process. Many testers are quick to respond with extensive graphs and charts. However, there is a serious problem in attempting to articulate the state of the testing solely through metrics. How do you identify the "right" metrics? How do you ensure those metrics are sufficient, accurate and conclusive? This session will review the importance of moving beyond the numbers game, placing less emphasis on providing the "right" metrics and more emphasis on the contextual conversation metrics should be generating. You will leave this session understanding the importance of educating stakeholders to question the numbers and instead engage in a discussion to better understand what is known and unknown about the product.

#### Risk-Based Testing on Steroids

Todd Kuczaj, Accenture

Track 5: 2:30 - 4:00

As organizations strive to hurry up software development in order to reduce time-to-market, there is significant probability that the software development processes will be compromised to "make the date." These compromises always seem to have a negative effect on the test team who has the difficult, if not impossible, task of helping ensure a quality release before shipping. Todd will discuss ways test managers can implement risk-based testing and describe fundamental quality and risk management techniques that can be leveraged throughout the development life cycle. Join Todd and learn the essentials of managing risk: identification, analysis, prioritization, response planning, resolution, and monitoring. Additionally, you'll learn the basics of risk-based testing, what it is, why it's relevant to testing, how to implement it in your organization, and how to apply it throughout the software development lifecycle.

# Thursday, April 7 - AFTERNOON

# Finding a Fit for Agile in Your Corporate Culture

Jim York, FoxHedge, Ltd.

Track 1: 2:30 - 4:00

Agile has a quick, brilliant, but far too often, brief impact on organizations, a shooting star effect. Why? It boils down to how well agile fits within your organizational culture. Long-term success applying agile principles and practices requires compatibility with corporate culture. Finding a fit can be challenging, but the payoff can be significant. This workshop looks at the impact of organizational culture on the sustainability of agile principles and practices and offers insights on how to improve your organization's chances of long term success with agile.

#### Requirements Exploration with Tester Collaboration

Ellen Gottesdiener, EBG Consulting

Track 2: 2:30 - 4:00

Collaboratively exploring requirements using analysis techniques enables product stakeholders, including testers, to build a shared understanding of needs. Defining acceptance criteria in tandem with requirements analysis verifies and specifies requirements early. Identifying acceptance criteria during requirements exploration acts as a form of low-fidelity requirements testing, exposes requirements misunderstandings, and increases the quality of team interactions. In this interactive workshop, you'll learn the essentials of requirements concepts, practices, and elicitation techniques and you'll explore a subset of analysis models useful for analyzing and testing requirements. You'll participate in a simulation using analysis models to explore requirements while defining acceptance tests. Join us to learn how tester participation in requirements exploration adds value early, seeds development of tests, and delivers highquality requirements specifications.

## Ten Tips for Tackling Test Automation

Bob Crews, Checkpoint Technologies

Organizations take on the challenge of test automation for a variety of reasons, but the overriding factor is always to realize a return on investment and, it is a significant investment. If the organization cannot save or earn more money using automation tools, then they should not be using the tools. After all, why make the investment? Objectives toward the goal of realizing an R.O.I. often include a faster testing process, better software though more validation, fewer resources required, and reduction in human error. Why then do so many organizations fall victim to the same common pitfalls? Why is it that so many automation solutions become "shelfware?" Is it the automation software or the resources? Or is it, perhaps, the lack of a planned automation methodology and approach? Bob will address all of these challenges and explain how organizations can tackle them head-on!

# **Open Information Sharing Dialogue**

Nancy Kastl, Kaslen Group, Inc.

Track 4: 2:30 - 4:00

Is there a topic of interest to you that is not being presented at QUEST this year? Then, the Solutions Forum is where you want to be. Attend the Solutions Forum to discuss the topic of your choice with QUEST speakers and your fellow QUEST practitioners. It's simple to participate. To place your topic on the list, post it to the Solutions Forum schedule by the QUEST registration desk on Wednesday or Thursday morning. Be sure to check out the other topics and consider combining your topic with any similar issues that may already have been posted. Next, vote for topics of interest to you. The topics selected for discussion in the Solutions Forum will be announced during Thursday's lunch. As the person who proposed the topic, you will introduce the discussion, describing the topic and explaining what they are interested in learning. If you feel that you can contribute to the topic or benefit from the discussion, please join the Forum. Everyone's ideas and productive debate are welcomed!

## **Exploratory on Purpose**

Jon Bach, eBay

Track 5: 2:30 - 4:00

Ever use the term "playing around" to describe your testing? Ever cringe after saying it, wishing there was a better way of describing what you did than to give the impression it was all accidental and random? If so, this workshop may help you understand and explain exploratory testing as a thoughtful, strategic approach that can stand up under scrutiny. Jon will talk about general and specific skills and tactics that comprise exploration, such as modeling, branching, threading, and conjecturing, to name a few. Join Jon and learn how to focus on bug isolation and investigation, and to expose risks and vulnerabilities. Discover frameworks and heuristics of exploration to use when you feel stuck, or feel that the product has not been tested as well as it should be and you need to dig deeper.

**QUEST Workshops** 



# Friday, April 8 - AFTERNOON

# Converting QUEST Ideas into Real Testing Improvements

Susan Herrick, Hewlett Packard

Track 1: 1:00 - 3:00

So, where do you go from here? QUEST 2011 is drawing to a close. You've spent the week attending tutorials, workshops, and presentations where you've been inundated with exciting and motivating ideas. You can hardly wait to start applying these ideas back in the real world. Yet, far too often, conference attendees return to work with great intentions that fade away under the pressure of their day-to-day commitments. What you need now is a game plan that will help you put what you've learned to work for you. By combining a thought-provoking presentation with collaborative hands-on activities, this workshop will give you the opportunity to assess the current level of testing maturity within your organization in terms of people, process and technology, determine your target level, and set up a plan that will put you on the road to getting from where you are today to where you need to be.

# Peak Performance: The Connection between Productivity and Stress

Elizabeth Glaser and Joyce Sattovia, The Boeing Company

Track 2: 1:00 - 3:00

Are you expected to do more with less? It's hard to hear and hard to do. It doesn't just happen because someone says that's what is needed. This highly interactive session looks at how to boost productivity in uncomplicated ways by using stress to one's advantage. Not all stress is bad stress. While our initial reaction is often that stress is the cause for us to underperform, stress is often necessary to help us reach our peak performance and the highest level of productivity. Dealing effectively with stress, both the good and the bad, can lead to increased productivity. This session uses experiential activities to ground the concepts that are discussed, allowing participants to understand and explore how to increase the positive effects of stress while decreasing the negative ones. Participants will gain practical information and techniques that can immediately be used to increase productivity in stressful work environments.

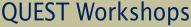
# Improving Productivity Through Automation Best Practices

Arthur Hicken, Parasoft

Track 3: 1:00 - 3:00

In this workshop, Arthur will explain how software development teams, including QA testers, can improve their productivity by introducing automated best practices into their process and monitoring them closely. Arthur will begin by discussing how these best practices can reduce development costs and help teams deliver better code in less time. He will introduce various techniques such as automated builds, automated static analysis, code reviews and inspections, and automated testing that have been shown to help teams achieve substantial benefits. Then, Arthur will demonstrate how to leverage automation to ensure that it is applied consistently, objectively, and non-intrusively. Finally, the workshop will conclude by exploring ways to use these practices to measure, control, and improve the team's overall process.





For detailed speaker biographies, please see session abstracts on-line



# **Transition and Exploration**

# By Jon Bach eBay

As I understand, the theme of this edition of the QUEST Magazine is Transformation. In order to transform, you must go through some level of a transition. Well, I have some recent experience with transition. After six years as Manager of Corporate Intellect at Quardev, I have just accepted an offer to be a Quality Director at eBay. In two weeks, I'll be moving from Seattle to San Jose. The transition will be from a small company to a multi-national; from solo test consultant to a manager of large teams; from rural Washington State to bustling Silicon Valley; from writing project proposals to writing strategic visions about notions of quality...

There's quite a bit to anticipate.

Transition is the word for the space you find yourself in after something comes to an end but before the new thing begins. It's a kind of purgatory where anxiety may reach to levels you haven't experienced in a long time, maybe even since your last transition. Yet each seems like the first, because we tend to forget how we got through the last.

There's plenty of business advice already out there for you to cope with transition, but not enough of us talk about the humanity or philosophy inherent in software project transitions. Software development is a complex human activity, so with respect to transition, a large part of my strategy for coping with limbo is to channel the Future Me that knows the answers.

Listen close and you will likely hear things like this:

- 1. You do the best you can with the information you have at the time.
- 2. If you ask "But how will it work out?" The answer is: "I don't know. There are mysteries in the world for you to experience."
- 3. At the last minute, there are usually interesting options. If not, then you know you're on the right path.
- 4. Remember, you've been fooled by appearances before.
- 5. Remember to ask for help. People love to say "yes." People like to feel smart and useful. People have solutions. People have ideas.
- 6. Take action. Try something. Transition is an opportunity and anxiety is energy. Use it to put something in motion.
- 7. You are not alone. You're not the first, nor the last. Has this been done before? No? Great, you're now the expert and whatever you feel you need to do will be the right thing - by definition.
- 8. Wait. Maybe you don't need to do anything. Remember when you reacted guickly to file a bug and it was nullified by new information you got later?

9. You don't have to consent. There's merit in staying the course, of holding your ground. Maybe this is one of those

Yes, this list is metaphysical. It may even come off as emotional, and therefore you might think it has no place in a magazine about software quality. Really... you have work to do on projects and are looking for practical advice and stories of experience that may be useful. So let's talk "game plan."

I'm a huge devotee of exploration as a powerful testing approach. Exploration is all about learning. It's enticing, expecting, and embracing this thing called "emergence" to help me find problems. It's about discovery. Many things emerge in transitions and are discovered in a way that's uncomfortable, that catches you off quard. Exploration fights that by allowing you a framework to take charge and not be a victim of the transition.

Contrary to perception, exploration has structure. Like agile development, it's meant to give you feedback fast and to react to change. It's all about learning new things about the software under test by engaging in critical thinking. When we're in transition, we rarely have a script (think, test cases) to follow to get us through; but we do have our wits, our intellect, and our scientific mind just as we have when we explore any new thing.

The 10th piece of advice from the Future Me encourages an important structure of exploration:

10. Ask questions. Do you really know what the transition is about? Really? Seriously? Has every question been asked and answered to your satisfaction?

It's normal to think in checklist procedures during stressful times, just as pilots have emergency checklists to fall back on when unexpected problems emerge, but think not just in cases (like the reminders above), but also in questions that guide your transition. If it's particularly chaotic where you work (that is, if there are many transitions per day), consider defining patterns of activity that need your attention and let them be defined by questions you have. I call these patterns "threads" because they're identical to email threads - topics that get your attention at different times of the day.

I may not know how I'll make it through this job transition, but I do know I can be agile and smart when it comes right down to it. I think you can be, too, and I wanted this article to serve as a reminder that although trouble may happen to you at any moment, the best idea to counter it may occur to you ONLY in that same moment, from a question you want answered, or from a thread you want to pursue. Having an exploratory mindset to frame these moments is a powerful weapon to meet transitions with grace and confidence.

# Transition and Exploration



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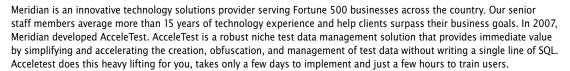
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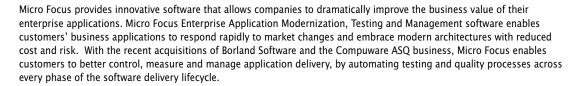
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http://www.professional tester.com/magazine/backissue/1/Professional Tester January 2010-Gloaguen.pdf

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Rafal Los Measure by Measure (Contributor, 2010) in Information Security Professional

Magic Numbers - The 5 Essential KPIs for Application Security (2011) www.hp.com

Measuring Web Application Security Coverage (Contributor, 2010) at www.net-security.org/dl/insecure/INSECURE-Mag-28.pdf

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Making Security Measurable and Manageable (2009) at

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Jim Over Look for Jim's SEI publications at http://www.sei.cmu.edu/library/

Johanna Rothman Managing Product Development at http://www.jrothman.com/blog/mpd

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Look for Johanna's articles at http://www.jrothman.com/papers-chron.html

Peter Varhol Defining Testing Practices for Agile Methodologies (2010) in T.E.S.T. Magazine

Accelerated Testing With Peter Varhol (2010) at

http://stickyminds.com/stickytoollook/index.asp?cd=10/5/2010#Interview

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(see page 29 for books authored by our speakers)

Authors - Articles, Blogs, and Podcasts



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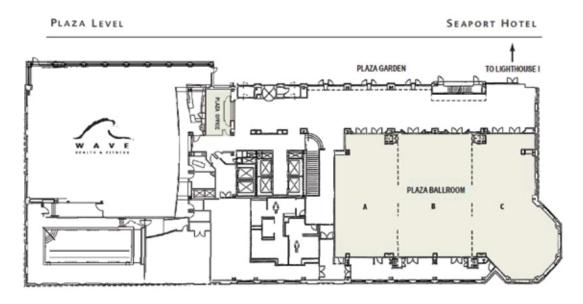
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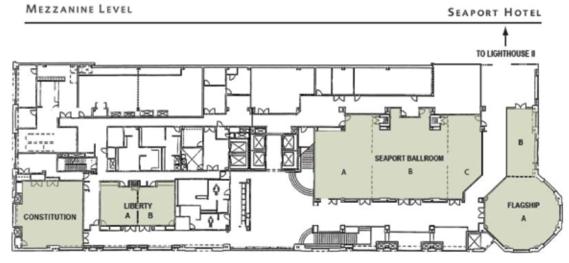


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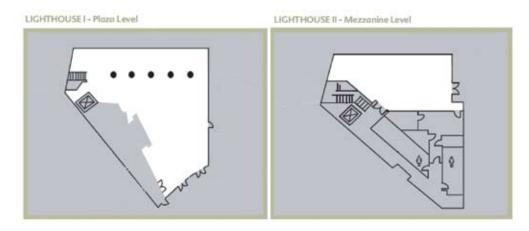


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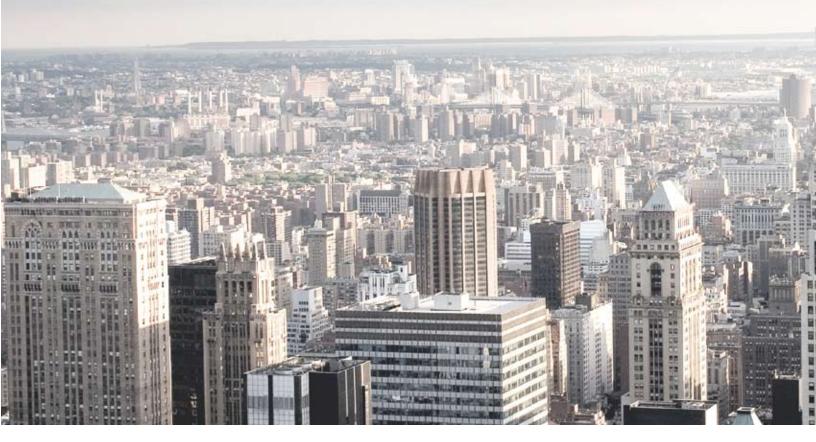


# Conference Site Floorplan



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