Advancing the understanding and practice of software testing

CAST 2010

Skills in Testing

August 2 – 4, 2010

Prince Conference Center
Grand Rapids, Michigan

www.CAST2010.org

Contents

Welcome

Conference Organizers

Program Committee
Robert Sabourin
Tim Coulter

Publicity & Marketing
Scott Barber
Benjamin Yaroch

Sponsorship
Scott Barber
Dawn Haynes

Local Arrangements
Matt Heusser

Registration & Logistics
Dawn Haynes

Facilitation
Paul Holland

Board of Directors

President
Doug Hoffman

Executive Vice-President
Cem Kaner

Vice-President at Large
Paul Holland

Acting Secretary
Dawn Haynes

Treasurer
Dee Ann Pizzica

Board Members
Jeff Fry
Tim Coulter
Ben Simo
Mike Kelly (honorary)

CAST 2010

Skills in Testing

August 2-4, 2010

Prince Conference Center, Grand Rapids, Michigan

Conference of the Association of Software Testing (CAST)

Keynote Presentations by:

Tim Lister
Cem Kaner

What makes CAST special?

CAST puts *CONFER* back into Conference:
At least 1/3rd of every session is reserved for facilitated discussion. We also provide additional space for late-breaking presentations and discussions that extend beyond the scheduled time. Conferring with testing practitioners and leaders is part of the program -- not just something that happens after hours.

CAST presentations are tied to a theme:
This year's theme is ***Skills in Testing***.

CAST is free from thinly veiled sales pitches:
CAST sessions are about experience, practice, and ideas -- not just products.

CAST contains new content:
Most of the presentations and tutorials at CAST are first-run content. We've assembled a cast of practitioners and thought-leaders with interesting stories and provoking ideas.

CAST is preceded by unique tutorials:
AST has lined up unique interactive tutorials -- each led by recognized thought leaders in their areas of expertise.

Our hope is that CAST helps you advance the understanding and practice of testing -- at your organization and around the globe. You'll have opportunities to share your ideas and learn from thought-leaders, trainers, authors, and peers. CAST 2010 is a participatory conference, please participate and enjoy.

Conferring at CAST

It is our desire that CAST help foster advancement in software testing – both in your organization and throughout the industry.

At CAST we focus on the *confer* part of the word *conference*. Each pre-scheduled session consists of a presentation followed by facilitated discussion about that presentation.

Unless instructed otherwise, you may only ask ***clarifying*** questions while a speaker is presenting.

Once a speaker is done, it becomes *Open Season* – at which point the floor is opened for discussion.

You will find colored index cards in your welcome packet. These ***K-Cards*** are used to signal the facilitator. When you want to join the discussion, please use your cards as follows:

Green: The ***New Stack/Thread*** card signals that you have a question or comment unrelated to the current discussion thread.

Yellow: The ***On Stack/Thread*** card signals the facilitator that you have a question or comment that relates to the current thread of discussion.

Red: The ***Burning Issue*** card is to be used only when you are urgently compelled to interrupt a speaker. It can be a point-of-order, an argument, a problem with facility acoustics, or something you need to say quickly because you've been provoked in a meaningful way. If you use your red card, the facilitator may confiscate it for the remainder of the conference – so use it wisely.

NOTE: Space is available if a group would like to continue discussing a topic beyond the allotted time.

Meals

All meals shown on the schedule are included in your registration fee for that day's activities.

We try to provide sufficient food variety to satisfy most dietary needs. If however the food provided doesn't meet your needs, please speak to the food service staff and they will try to accommodate you.

AST Elections and Annual Meeting

The AST is a non-profit professional association dedicated to improving the practice of software testing by advancing the science of testing and its application.

The AST is run by members who volunteer as a nominated, elected slate of officers. The AST elections for the Board of Directors will be held during lunch on Tuesday, Aug 3rd. Non-members and Associate members may *not* vote. Only full members who have been members for at least one month can participate in the voting process.

If you would like to become a voting member for next year's elections, please visit

http://join.AssociationForSoftwareTesting.org.

The AST Annual Membership Meeting where election results will be announced and an overview presentation is presented to the membership will be held during lunch on Wednesday, Aug 4th.

AST Board Meeting

Join us Sunday for the AST Board Meeting which is open to all members. The Board will meet 9am-5pm in "President's Dining".

About AST

Advancing the understanding and practice of software testing

AST's Mission

The Association for Software Testing is a nonprofit professional organization dedicated to advancing the understanding and practice of software testing. The AST serves a community of scholars, students, and software development practitioners by providing forums for discussion of all aspects of software testing through conferences, training, publications, websites, and other services.

Why Join AST?

Often, those who are not yet members of the AST ask what value they will get by joining. It's difficult to answer this question briefly because individual members obtain different value from different aspects of membership – both tangible and intangible.

Tangible Benefits

Free online testing courses (Black Box Software Testing)

Significant discounts on fees for live events* *(Benefit not available to Associate Members)*

Non-Tangible Benefits

AST was founded with the aim to better the state of software testing and the lives of testers through programs like the ones above, but also through less tangible ways like those below:

AST members agree to a Code of Ethics, demonstrating support for principles shared by hundreds of other members around the world. Membership in any professional testing organization may help show prospective employers your affiliation to a community, but with the AST, it is the affiliation with these community ethics that demonstrates the members' commitment to the advancement of testing as both thoughtful craft and technical discipline.

AST is dedicated to improving the practice of software testing by framing it in the art and science of critical thinking. For example, how could commonly held beliefs and principles about software development change as they apply to projects in different contexts? Could it actually be cheaper to fix a bug later in the project lifecycle? By becoming an AST member, you show an affiliation with an organization devoted to the discussion of issues like this that recognize both the philosophy of testing and its practical grounding.

AST is working to better the working lives of testers. One way we accomplish this is through our Special Interest Groups (SIGs). A SIG is a group of AST members who share a desire to pursue a specific, significant long-term activity in an area of interest to the Association. Some examples of topics currently being pursued by SIGs include: Tester Education and Testing in Financial Services.

You can choose to make a difference in the future of the testing profession and in social issues that face our field (like in the SIGs above) by tackling the topics that mean the most to you. As a member of the AST, you can participate in these groups and help research, support, and advance causes that you believe are important to the field of testing. If topic of interest to you is not currently being addressed by a SIG, AST will help you form a SIG so that you can lead the charge in advancing your area of interest.

With AST, you are becoming a member of a community of testers who share many of your views about the most important challenges facing our field and who are interested in resolving (or at least improving upon) those challenges through collaboration, innovation, advancement and/or education at the individual, team, project, and field levels. Sometimes we face challenges that only other testers can understand, so the networking aspects of the AST allow you to find other testers to seek ideas and feedback.

At CAST, you'll see that our membership includes some of the best-known, passionate thinkers and practitioners in the business, each of whom considers themselves as much a student as they are an expert. Ask them and they will tell you that they obtain value from even the smallest AST-sponsored workshops like the Workshop on Heuristic and Exploratory Techniques (WHET), the Workshop for the Teaching of Software Testing (WTST), and Software Testing in Financial Services (STiFS). Each of these small forums are known for their innovative discussions framed by a Creative Commons License to ensure that participants can collaborate and produce new content of value to the broader testing community without squabbling over who owns the content.

Want to Join AST?

http://join.AssociationForSoftwareTesting.org

AST Guiding Principles

General

AST is focused on supporting the development of professionalism in software testing, among practitioners and academics, at all levels of experience and education.

AST views software testing as an empirical, technical investigation conducted to provide stakeholders with quality-related information.

AST views software testing as a cognitively complex activity that requires critical thinking, effective communication, and rapid self-directed learning.

AST believes willingness to work collaboratively through controversy is vital to the growth and education of the field and those in it.

AST fosters future generations of leadership in software testing through emphasis on personal growth in both ethical behavior and technical competence.

AST supports the credentialing of software testers to the extent that the credential is marketed and presented consistently with the levels of knowledge, skill and experience that the credential measures or reflects.

AST values all types of instruction in software testing, from all sources, to the extent that the instruction, instructional materials, and assessment are marketed honestly and promote the development of knowledge, skills, critical thinking, and respect for the diversity of well-informed views in the field.

Governance

AST's leaders make decisions based on AST's ethics, AST's brand integrity, and value for AST members while being mindful of the potential for conflicts of interest for our members, volunteers, and staff.

AST strives toward making the organization self-sustaining through means other then strictly volunteerism.

AST finances its mission through products and services consistent with its nonprofit status, code of ethics, these seven guiding principles, and its high values of quality, relevance, and integrity.

AST Education

Black Box Software Testing (BBST) Online Education for Testing Practitioners

The Association for Software Testing is offering a series of online courses in software testing to our members.

Too many testing courses emphasize a superficial knowledge of basic ideas. This makes things easy for novices and reassures some practitioners that they understand the field. However, it's not deep enough to help students apply what they learn to their day-to-day work.

The BBST series attempts to foster a deeper level of learning by giving students more opportunities to practice, discuss, and evaluate what they are learning.

Each BBST course includes video lectures, quizzes, homework, and a final exam. Every participant in the course reviews work submitted by other participants and provides feedback and suggests grades.

AST is currently offering the following two courses:

Foundations

This first course (a prerequisite for all other courses in the series) is a basic introduction to black box testing. It presents basic terminology and considers:

- the mission of testing
- the oracle problem
- the measurement problem
- the impossibility of complete testing

Bug Advocacy

Bug reports are not just neutral technical reports. They are persuasive documents. The key goal of the bug report author is to provide high-quality, well-written, information to help stakeholders make wise decisions about which bugs to fix when. Key aspects of the content of this course include:

- Defining key concepts (such as software error, quality, and the bug processing workflow)
- the scope of bug reporting (what to report as bugs, and what information to include)
- Bug reporting as persuasive writing
- Bug investigation to discover harsher failures and simpler replication conditions
- Excuses and reasons for not fixing bugs
- Making bugs reproducible
- Lessons from the psychology of decision-making: bug-handling as a multiple-decision process dominated by heuristics and biases.
- Style and structure of well-written reports

For more information:
http://training.AssociationForSoftwareTesting.org

Pre-CAST

Sunday, August 1

9:00a - 5:00p	**AST Board Meeting** [President's Dining] (Open to all Members)	
6:30p - 9:00p	**Reception** [Fireside Room] *Provided by: Quality Intelligence*	**6:30-8:30** **Jobs & Networking** [Willow West] (Open to the Public)

Full Day Tutorials

Monday, August 2

7:00a	**Registration Opens**		
7:30a - 8:30a	**Breakfast** [Great Hall East]		
8:30a - 10:00a	**Speaking Truth to Power** Fiona Charles [White Pine & Maple]	**Scenario-Driven Testing** Cem Kaner [Willow East]	**Exploratory Test Automation** Harry Robinson [Hickory East]
10:00a - 10:20a	**Morning Break** [Fireside Room]		
10:20a - 12:00p	**Speaking Truth to Power** Fiona Charles [White Pine & Maple]	**Scenario-Driven Testing** Cem Kaner [Willow East]	**Exploratory Test Automation** Harry Robinson [Hickory East]
12:00p - 1:00p	**Lunch** [Great Hall East]		
1:00p - 3:00p	**Speaking Truth to Power** Fiona Charles [White Pine & Maple]	**Scenario-Driven Testing** Cem Kaner [Willow East]	**Exploratory Test Automation** Harry Robinson [Hickory East]
3:00p - 3:20p	**Afternoon Break** [Fireside Room]		
3:20p - 5:00p	**Speaking Truth to Power** Fiona Charles [White Pine & Maple]	**Scenario-Driven Testing** Cem Kaner [Willow East]	**Exploratory Test Automation** Harry Robinson [Hickory East]
6:30p - 9:00p	**Opening Night Reception** [Fireside Room] *Provided by: Microsoft Bing*	**6:30-8:30** **Freelancing & Consulting** [Willow East] **6:30-8:30** **Mentoring** [Board Room]	

Full Day Tutorials

Full Day

Speaking Truth to Power

Testers are paid to deliver unwelcome news to more powerful people. Too often, the interaction doesn't go as well as we'd like and we have to deal with adverse reactions ranging from merely disbelieving to downright hostile.

Delivering bad news well takes skill, as does dealing with many of the recipient's reactions. For most people, the ability to do these things at all—let alone well—does not come easily.

In this full-day tutorial, we will practice speaking truth to power, examining and building relevant skills and knowledge along the way. Topics we'll cover include:

- Common pitfalls and how to avoid them
- Questions to ask and things to do before we speak
- Strategies, models and techniques that can help us understand and deal with difficult conversations successfully

Delivering bad news isn't fun, but we can have fun exploring and practicing how to do it. This tutorial will consist primarily of experiential exercises and debriefs. We will practice with real situations that have happened for real testers, including current problems brought by participants.

Fiona Charles teaches organizations to match their software testing to their business risks and opportunities. With more than thirty years experience in software development and integration projects, she has managed testing and consulted on testing on many projects for clients in retail, banking, financial services, health care, and telecommunications.

Throughout her career Fiona has advocated, designed, implemented, and taught pragmatic and humane practices to deliver software worth having—in even the most difficult project circumstances. Her articles on testing and test management appear frequently in Better Software Magazine and on StickyMinds.com. She edited The Gift of Time, and guest-edited the January 2010 issue of Software Test & Performance magazine. Fiona is co-founder and host of the Toronto Workshop on Software Testing.

Scenario-Driven Testing

Scenarios are credible stories about something that could happen in the future. Scenario tests involve scenarios that are likely to motivate a stakeholder with influence to demand that the product be fixed if it doesn't pass the tests. To achieve this, good scenarios convey human issues (why would people be unhappy, and how unhappy, if the program fails this test?) as well as the technical matters of software design.

The focus of this tutorial is how to design effective suites of scenario tests. The tutorial will start with a lecture that lays out several lines of analysis for creating scenarios. Each line will lead you to a different set of tests. Some are more productive for a given product (lead to more interesting tests) than others. The lecture will last about an hour. Then we'll practice (in small groups) applying lines of analysis to different software products, tying what we find back into a couple of general-group presentations and a summary at the end of the day.

Cem Kaner has pursued a multidisciplinary career centered on the theme of the satisfaction and safety of software customers and software-related workers. With a law degree (practice focused on the law of software quality), a doctorate in Experimental Psychology, and 17 years in the Silicon Valley software industry, Dr. Kaner joined Florida Institute of Technology as Professor of Software Engineering in 2000. Dr. Kaner is senior author of three books: *Testing Computer Software* (with Jack Falk and Hung Quoc Nguyen), *Bad Software* (with David Pels), and *Lessons Learned in Software Testing* (with James Bach and Bret Pettichord). At Florida Tech, his research is primarily focused on the question, *How can we foster the next generation of leaders in software testing?* See TestingEducation.org for some course materials and this Proposal to the National Science Foundation for a summary of the course-related research.

Full Day Tutorials

Full Day

Exploratory Test Automation

Exploratory testing emphasizes human creativity and thinking, but its effectiveness is limited if you can only do manual testing.

Test automation focuses on speed and power, but it rarely finds interesting bugs and is usually relegated to regression test duty.

Exploratory test automation blends the best of the two approaches - combining human judgment and computer horsepower to create testing that is thorough, robust, and flexible. This tutorial shows you how to extend the reach of your exploratory testing using creative problem-solving, lightweight automation, heuristic oracles, and common sense.

As economist Leo Cherne said in the 1970s:"The computer is incredibly fast, accurate, and stupid. Man is unbelievably slow, inaccurate, and brilliant. The marriage of the two is a force beyond calculation."

Harry Robinson is Principal SDET for Microsoft's Bing team. He has twenty years of software development and testing experience at AT&T Bell Labs, Hewlett-Packard, Microsoft, and Google as well as time spent in the startup trenches. While at Bell Labs, Harry created a model-based testing system that won the AT&T Award for Outstanding Achievement in the Area of Quality. At Microsoft, he pioneered the model-based test generation technology, which won the Microsoft Best Practice Award. Harry holds two patents in software test automation. He coaches test teams throughout Microsoft and speaks and writes on software quality with a focus on innovative approaches to computer-assisted testing.

VISTACon 2010

September 20 to 22, 2010

White Palace Convention Center
194 Hoang Van Thu Street, Phu Nhuan District, HCMC, Vietnam

http://www.vistacon.vn/

Sponsors

DornerWorks is an electronic hardware and embedded software firm that specializes in the design of safety critical embedded systems for the aerospace, medical and automotive markets. With substantial and successful experience in the design and development of embedded software and electronic hardware, DornerWorks can tackle your most complex projects. We've designed systems for some of the world's leading aviation, medical device, and automotive companies. From software requirements through V&V, from board design through UL compliance, our experience ensures that when working with DornerWorks you achieve the highest return on your development dollar.

Our specialties include:

- Embedded Software Development
- Electronic Hardware Development
- FPGA Custom Logic Engineering
- Requirements Definition
- Electronic System Architecture

DornerWorks– ***where software and hardware design meet***

Software Test Professionals (STP) serves the global software testing and quality community, providing more than 50,000 professionals with information, education and professional networking opportunities.

STP offers valuable white papers, podcasts, conferences and other networking events such as the local interest chapters to help you stay on top of the trends shaping the industry's future. One of the upcoming events is the Software Test Professional Conference & Expo 2010, held October 19-21 in Las Vegas, Nevada. Learn more about the conference by visiting www.stpcon.com.

The association is also your resource for the industry's top magazine, *Software Test & Quality Assurance*. The magazine is mailed to association members and is also available on the association's site. The website is your everyday connection to articles, case studies, best practices and Crews - the best of social media for the software test professional.

Visit us online to learn more about membership and to access the wide array of software testing resources available: www.softwaretestpro.com.

Sponsors

AmiBug.Com

PerfTestPlus, Inc.
ptp
Better Testing...Better Results

Purpose:

AmiBug's purpose is to help companies, and individuals, succeed in developing quality software solutions in a timely, and cost effective manner.
AmiBug will help companies to organize their product development teams, departments and projects!
AmiBug will teach, and demonstrate by example, simple truths about how to achieve excellence in all aspects of software development without overburdening people with heavy process and procedures.
AmiBug will help software developers grow professionally through teaching, coaching and management consulting.
AmiBug will help advance the professional practice of Software Engineering and help improve the quality of life of software development professionals and their families.
AmiBug will promote the Software Quality Assurance and Requirement Management roles as being a fundamental part of any commercial software development process.

Core Values:

Purpose: AmiBug keeps on purpose!
Honesty: AmiBug builds trusting relationships.
Integrity: AmiBug makes and keep commitments.

Socialtext

Socialtext addresses the critical issues organizations face as their people and teams struggle to share knowledge, ideas and expertise. With Socialtext's enterprise social software platform, people and teams are synchronized, highly engaged and able to move fast. The Socialtext collaboration platform employs a broad set of social software technologies including microblogging, social networking, filtered activity streams, widget-based dashboards, blogs and wikis. Socialtext offers both the convenience of SaaS and the security of an on-site appliance, for the fastest time to

PerfTestPlus, Inc. offers advising, consulting and training services as well as resources to bring software testing expertise and thought-leadership to organizations seeking to push their testing beyond "state-of-the-practice" to "state-of-the-art." Our testing services are designed and delivered by name-brand consultants who subscribe to our integrity driven, value focused philosophy. With PerfTestPlus there is no "bait and switch," no account manager trying to make a commission, and no presumption that we will accept every project that comes our way. As a result, PerfTestPlus only accepts projects when we believe we can provide the service you need at the high degree of quality you deserve.

spiraTest®

SpiraTest by Inflectra - A complete quality assurance and test management system with integrated release scheduling and defect tracking. It manages your project's requirements, test cases and defects/bugs with requirements traceability and comprehensive coverage analysis.

Software Quality Methods, LLC.

Software Quality Methods, LLC., (SQM) provides organizations with management consulting and training to produce higher quality software. SQM specializes in design of test automation, and transformation of software development and quality assurance organizations. The President and Principal Consultant, Douglas Hoffman, has extensive experience with systems and software in the computer industry. Visit: www.softwarequalitymethods.com.

Sponsors

ASTQB
American Software Testing Qualifications Board, Inc.
ISTQB Certification in the U.S.

ASTQB is the American arm of the International Software Testing Qualifications Board in 40+ countries with over 135,000 software testers certified worldwide. We develop the body of knowledge and glossary that a software tester should understand, and test to it with an examination to grant the professional credential.

www.ASTQB.org

"Make sure it works." Since 2005, **Neotys** has been helping customers in more than 60 countries ensure the reliability, performance and quality of their web applications. NeoLoad, our load testing solution, increases productivity enabling tests to be conducted faster, provides in-depth performance analysis and full support for new technologies.

SearchSoftwareQuality.com

SearchSoftwareQuality.com is an online community for developers, architects and executives interested in building secure and quality software. The site provides information on software quality management, software testing and quality assurance (QA), application threats and vulnerabilities, software maintenance and bug tracking, and how to build quality and security into the software development life cycle (SDLC). SearchSoftwareQuality.com also provides in-depth coverage on how to ensure quality using different development models and methodologies.

SearchSoftwareQuality.com

RiverGlide
flow without friction

RiverGlide amplifies what you can achieve by helping you to grow your skills or deliver new capabilities. Our people have a track record of developing software, increasing productivity and coaching agile methodologies for numerous organizations. RiverGlide was formed by Antony Marcano and Andy Palmer with the following values at its core:

- **Trust and Transparency** *Frequently demonstrating progress, not just reporting progress.*
- **Integrity and Courage** *Telling you what you need to know not what we think you'd like to hear.*
- **Innovate and Grow** *Constantly learning, developing our skills, trying new things and growing new ideas.*

These values are evident in everything we do, including our approach to creating this website.

TalkToUs@RiverGlide.com or +44(0) 845 056 9606 to explore how our values and talents can benefit you.

gomez
The Web Performance Division of Compuware

Gomez, the Web performance division of Compuware, provides the industry's leading solutions for optimizing the performance, availability, and quality of Web and mobile applications. The on-demand Gomez platform integrates solutions for Web load testing, Web performance management, Web cross-browser testing, and Web performance business analysis that test and measure Web and mobile applications from the "outside-in" - across all users, browsers, devices, and geographies - using a global network of over 100,000 locations. When combined with Compuware Vantage, Gomez offers the industry's only solution for optimizing application performance across the Enterprise and the Internet. Over 3,000 customers worldwide, ranging from small companies to large enterprises - including 12 of the top 20 most visited US Web sites - use Gomez solutions to increase revenue, build brand loyalty, and decrease costs.

Item Sponsor

USB Memory Keys

ASTQB American Software Testing Qualifications Board, Inc.
ISTQB Certification in the U.S.

Special Thanks

Agile Alliance

With more than 4261 members located around the globe, the Agile Alliance is driven by the values and principles of the Manifesto for Agile Software Development

We support those who explore and apply Agile principles and practices to make the software industry productive, humane, and sustainable.
agilealliance.org

bing

Unlike most search engines, Bing serves up more than long lists of links. We organize our Search results so they're easy to read and you can make informed choices ... faster.

Spend more time living and less time searching. Step away from the chaos ... and into the new generation of Search.

It's smart, it's visually organized, and it keeps things simple. Try it today!

www.bing.com

DevelopSense

DevelopSense was founded by Michael Bolton in 1998 in Los Angeles, California, to provide testing and consulting services. In 2002, Bolton returned to his home - Toronto.

In 2003, Bolton began a close collaboration with James Bach. In the last several years, Bolton has taught the Rapid Software Testing course that he now co-authors with Bach in Canada, the United States, Brazil, France, Germany, India, Singapore, Spain, Sweden, and Turkey. Bolton has given presentations on Rapid Software Testing, exploratory testing, and a host of other testing and management topics at conferences all over the world.

In 2005, Bolton co-founded (with his colleague Fiona Charles) the Toronto Workshop on Software Testing, and he has written a regular column for *Better Software Magazine* (formerly STQE) since 2005. Through 2005, he also tested for a large Canadian financial services organization. developsense.com

PROFESSIONAL TESTER
Essential for software testers

Professional Tester is published by Test Publishing Limited.

Test Publishing Limited is a European technology media company serving the technology industry, providing entrepreneurs, investors, service providers and other participants with a single-source view of high-tech Europe featuring primary research, editorial coverage, startup awards and events.

professionaltester.com

The Rebel Alliance: Known by many names (including "The CASTAways"), the Rebel Alliance is an informal group of software testers who are energized by the craft of testing, committed to test excellence, and believe that testing should be /fun/.

Software Testing Club
a community for software testers

The Software Testing Club was founded in 2007 by Rosie Sherry after a clear need for a community for software testers with a *quality approach*.

It started out as an experiment without high expectations. It is now a leading and thriving community for software testers.
softwaretestingclub.com

QUALITY INTELLIGENCE
Intelligence about software quality, intelligently applied

Quality Intelligence is a Toronto-based company offering test consulting and test project management, specializing in large-scale integrations, high risk projects, and rescues of stalled testing efforts. It was founded in 2007 by Fiona Charles, who brings more than 30 years of experience in software development and integration projects. She has managed testing and consulted on testing on many projects for clients in retail, banking, financial services, health care, telecommunications, and critical national infrastructure.

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http://www.quality-intelligence.com

Exhibitors

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Day 1

Tuesday, August 3

7:00a	**Registration Opens**		
7:00a - 8:00a	**Breakfast** [Great Hall East] *Please visit our sponsors*		
8:00a - 9:00a	**CAST Introduction: Tim Coulter & Rob Sabourin** [Great Hall East]		
9:00a - 10:20a	**Keynote: Tim Lister*** We Need It Before The End of The Year: What's Your Estimate? [Great Hall East] **Made Possible by DornerWorks*		
10:20a - 10:40a	**Morning Break** [Fireside Room] *Please visit our sponsors*		
10:40a - 11:50a	**Joining the Scrum Team: A Tester's Story** Johan Jonasson [White Pine & Maple]	**Technical Versus Non-technical Tester Skills in Test Automation** *Dorothy Graham* [Willow East]	**A Framework to Evaluate Testing Skills Effectiveness** Alan McKellar, Kim Jensen [Willow West]
11:50a - 1:20p	**Lunch (AST Business Meeting, & Annual Elections)** [Great Hall East] *Please visit our sponsors*		
1:20p - 2:30p	**Experiences and Insights of a Novice Agile Software Tester** Zachary Spencer [White Pine & Maple]	**Exploratory Test Automaton** Cem Kaner, Doug Hoffman [Willow East]	**Panel Discussion: Assessing Testing Skill During the Job Interview** David Liebreich [Willow West]
2:40p - 3:50p	**Cutting the Mustard – Lessons Learned in Striving to Become a Superstar Tester** Nancy Kelln [White Pine & Maple]	**Adopting and Adapting Open Source Testing Tools** Scott M. Allman [Willow East]	**Downsizing, Off shoring, Outsourcing: What Skills are Needed Where?** Jane Fraser [Willow West]
3:50p - 4:10p	**Afternoon Break** [Fireside Room] *Please visit our sponsors*		
4:10p - 5:20p	**Internationalization and Localization Testing Skills** Matta Saikali [White Pine & Maple]	**Coping With Complexity: Lessons From a Medical Device Project** Yaron Kottler [Willow East]	**Unifying Industrial and Academic Approaches to Domain Testing** Cem Kaner, Sowmya Padmanabhan [Willow West]
6:00p - 9:00p	**Social** [Dogwood] *Provided by: Matt Heusser (Appetizers), Michael Bolton (Beverages), Rebel Alliance (Suite)*	**6:30p-8:00p** Software Testing In Financial Services [Willow West] **8:00p-9:00p** Education SIG [Willow East]	

AST Annual Elections

The AST is a non-profit professional association dedicated to improving the practice of software testing by advancing the science of testing and its application.

The AST is run by members who volunteer as a nominated, elected slate of officers. The AST elections for the Board of Directors will be held during lunch on Tuesday, August 3rd. Non-members and Associate members may not vote, only full members who have been members for at least one month can participate in voting process.

If you would like to become a full member please visit http://join.AssociationForSoftwareTesting.org.

The AST Annual Membership Meeting where election results will be announced and an overview presentation is made to the membership will be held during lunch on Wednesday, August 3rd.

Day 2

Wednesday, August 4

7:00a	**Registration Opens**		
7:00a - 8:00a	**Breakfast** [Great Hall East] *Please visit our sponsors*		
8:00a - 8:30a	**Welcome** [Great Hall East]		
8:30a - 9:40a	**Keynote: Cem Kaner** Investment Modeling as an Exemplar of Exploratory Test Automation [Great Hall East]		
9:40a - 10:50a	**Testing in Large-scale Scientific Computation: The Short Circuit Method** Monica Wodzislawski, Gaston Gonnet [White Pine & Maple]	**What Haven't You noticed Lately? Building Awareness in Testers** Michael Bolton [Willow East]	**Communicating With Non-Testers** Catherine Powell [Willow West]
10:50a - 11:10a	**Morning Break** [Fireside] *Please visit our sponsors*		
11:10a - 12:00p	***Lightning Talks*** [White Pine & Maple]	***Lightning Talks*** [Willow East]	***Lightning Talks*** [Willow West]
12:00p - 1:00p	**Lunch (Annual Elections & Membership Meeting)** [Great Hall East] *Please visit our sponsors*		
1:00p - 2:10p	**The Art of Visualization** Selena Delesie [White Pine & Maple]	**Mining for Gold: Bug Isolation** Jean Ann Harrison, Molly Mahai [Willow East]	**Dealing with Dispassionate Testers** Henrik Andersson, Carsten Feilberg [Willow West]
2:20p - 3:30p	**Testability and Technical Skill** Greg McNelly [White Pine & Maple]	**Reporting Skills and Software Testing** Karen N. Johnson [Willow East]	**Communication Chameleons** Selena Delesie [Willow West]
3:30p - 3:50p	**Afternoon Break** [Fireside] *Please visit our sponsors*		
3:50p - 5:00p	**Assessing Your Value as a Tester** Lynn McKee [White Pine & Maple]	**Nice Words are Not Enough** Carsten Feilberg, Louise Perold [Willow East]	**Using a Wiki for Communication and Collaboration** Marlena Compton [Willow West]
5:10p - 5:30p	**Closing Remarks: Tim Coulter, Rob Sabourin** [Great Hall East]		
6:30p	**Game Night and Social** [Fireside] *Provided by: Anonymous Donor*		

Day 1 - Keynote

9:00a - 10:20a

We Need It Before The End Of The Year: What's Your Estimate?

No matter what your position on a project you must be a good estimator of your work, and it is a cardinal sin to let good estimates by smart people be overwhelmed by the strong desires of powerful people. Accurate estimates are the foundation of all critical project decisions regarding staffing, functionality, delivery date, and budget. How do we accurately estimate in a world where tradition declares that the deadline is set before the requirements are even known? Tim will offer practical advice on dealing with this thorny issue. He will present strategies and tactics for project estimating and will describe his favorite estimating metric, the Estimating Quality Factor (EQF). By thinking that goals are important and so are good estimates; you will be on the road to better quality and better projects.

Tim Lister is a Principal of the Atlantic Systems Guild, Inc., based in the New York office. He divides his time between consulting, teaching, and writing. Currently he is working on tailoring software development processes using software risk management techniques. He has been an invited speaker at the Agile Development Conference three times. Tim was a guest lecturer on software risk management at the Stanford University School of Business, and gave the Dean's Lecture at the Rochester Institute of Technology. He was a member of the *Airlie Software Council*, a group of industry consultants, advising the DoD on best practices for software development and acquisition, and is a member of the Cutter Business Technology Council.

Tim, along with the other five Principals at the Guild, is co-author of *Adrenaline Junkies and Template Zombies: Understanding Patterns of Project Behavior*, (Dorset House, 2008). He is co-author with Tom DeMarco of the text, *Waltzing With Bears: Managing Software Project Risk*, (Dorset House, 2003), which won the Jolt Award for best general computing text in 2003-2004. Tim and Tom are also co-authors of *Peopleware: Productive Projects and Teams, 2nd ed.* (Dorset House, 1999). *Peopleware* has been translated into ten languages. Tim Lister and Tom DeMarco are also co-editors of *Software State-of -the-Art: Selected Papers*, a collection of 31 of the best papers on software published in the 1980's (Dorset House, 1990). The two partners have also produced a video entitled *Productive Teams*, also available through Dorset House.

Tim Lister has over 35 years of professional software development experience. Before the formation of the Atlantic Systems Guild, he worked at Yourdon Inc. from 1975 to 1983. At Yourdon he was an Executive Vice President and Fellow, in charge of all instructor/ consultants, the technical content of all courses, and the quality of all consultations.

Tim Lister lives in Manhattan. He holds an A.B. from Brown University, and is a member of the I.E.E.E. and the A.C.M. He also serves as a panelist for the American Arbitration Association, arbitrating disputes involving software and software services, and has served as an expert witness in litigation proceedings involving software problems.

Day 2 - Keynote

8:30a - 9:40a

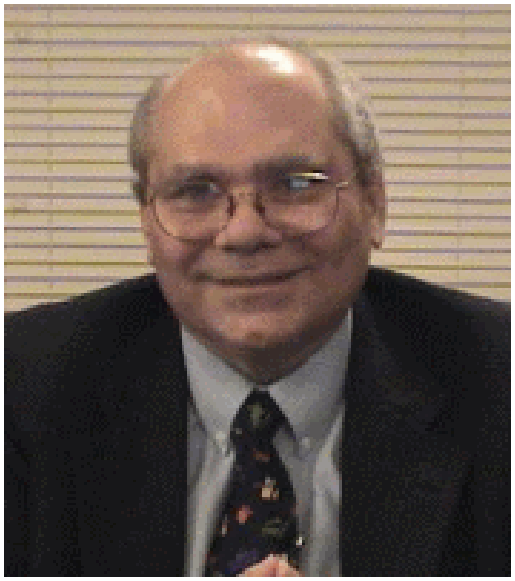
Investment Modeling as an Exemplar of Exploratory Test Automation

Most of the activity in modern stock markets is programmed. In algorithmic trading, which accounted for over 60% of equity transactions in American exchanges last year, software decides what to buy and what price (and how much) and when to place the trades. Imagine testing one of these systems. You could focus on VERIFICATION—does the system correctly implement the model (does it make the trades the underlying model would make) and does it execute the trades correctly (placing the right orders, monitoring the results and recognizing errors). You could focus on OPTIMIZATION and PERFORMANCE—in a fiercely competitive marketplace, the software must quickly get data from the exchanges, interpret the data and get orders to the exchanges and it must do so under competition for resources (e.g. load) at the local system level, in the services the system relies on, and in the paths to the exchanges. You could focus on SECURITY—how vulnerable is the system to espionage or interference? And you can focus on VALIDATION—is this the right model? It doesn't help anyone (except your competitors) if you can reliably and quickly get the wrong trades to the exchange.

You can probably do the basic verifications as regression tests, maybe even as manual regression tests, but the rest of these concerns require good tools, intense automation, and most of this testing should be exploratory.

Doug Hoffman and I started teaching techniques for automated ET in the late 1990's, calling them "high volume test automation." These techniques go after bugs that are virtually impossible to expose or isolate in manual testing. One of the challenges in teaching automated ET is the extent to which sophisticated testing relies on a deeper knowledge of the application under test. As I've worked with investment models over the past two years, I've realized that this is a type of application that can probably capture the interest of most of the people in our community and thus serve as a good foundation for explaining where I think the next generation of testing should be headed.

These are not new ideas. I have no desire to rebrand them and pretend that my clique of academics and consultants invented them. I first saw automated ET techniques in use in 1985; Hoffman was using some over 30 years ago. These ideas have old roots. My contribution is to make them a little more accessible, via better explanation and examples, with a little better cheerleading for ideas whose time is long overdue.



Cem Kaner has pursued a multidisciplinary career centered on the theme of the satisfaction and safety of software customers and software-related workers. With a law degree (practice focused on the law of software quality), a doctorate in Experimental Psychology, and 17 years in the Silicon Valley software industry, Dr. Kaner joined Florida Institute of Technology as Professor of Software Engineering in 2000. Dr. Kaner is senior author of three books: *Testing Computer Software* (with Jack Falk and Hung Quoc Nguyen), *Bad Software* (with David Pels), and *Lessons Learned in Software Testing* (with James Bach and Bret Pettichord). At Florida Tech, his research is primarily focused on the question, *How can we foster the next generation of leaders in software testing?* See TestingeEducation.org for some course materials and the proposal to the National Science Foundation for a summary of the course-related research.

Day 1 Sessions

10:40a - 11:50a

Joining the Scrum Team: A Tester's Story

Joining a Scrum team as the only test professional on that team is filled with challenges. Scrum doesn't say much about testing, it's up to the team to decide the most appropriate strategy. I will present an experience report from when I joined a newly formed Scrum team unfamiliar with all forms of structured testing. I will share the assumptions we made as a team fairly new to Scrum as well as our failures and successes. The talk will center around the context specific challenges from a test perspective and how to show the organization the value of having a dedicated test professional on the team.

Being fairly new to agile in general, the team members were faced by many questions. I'll use these questions as a starting point in my talk, present our solutions and the pitfalls some of them led to. From a tester's perspective, the main challenges were connected to finding the appropriate mix of scripted and freestyle testing, what to automate, bug handling and teaching the organization the value of having dedicated test professionals.

Learning outcomes:

- The role of the test professional on a Scrum team. Needed or not?
- Defect management. Don't let the bugs weigh your team down.
- Adapting testing strategy to change as the project progresses.
- Finding the right level of test automation.

Johan Jonasson works as an independent test consultant at House of Test, a testing services company based in southern Sweden. Originally coming from a strict, European style, scripted testing background, Johan started taking an interest in agile and exploratory approaches to testing a few years ago and has since then worked with several large organizations to help them transform their testing approaches and become more responsive and adaptive to change.

10:40a - 11:50a

Technical versus Non-technical Skills in Test Automation

There is view that testers should be technical, especially if they are involved in test automation.

Although this can work well, particularly in an agile team, not all testers need or want to be technical, especially those with a business or application background – it is my belief that this should not preclude them from using test automation!

There are two levels of abstraction needed for good automation. A separation of testware from the detailed working of any particular tool is needed to minimize testware maintenance – this requires technical skill.

In order to gain widespread use of test automation, the testers' view of the tests should be separated from the technical view, as in a keyword-driven approach (aka "hybrid", "framework", "Domain-Specific Test Language"). This abstraction level enables system or business acceptance testers to write automated tests without needing technical skills. Technically skilled test automators should support and enable non-technical testers to write and run automated tests.

Dorothy Graham is an internationally renowned consultant, speaker and author, who has been in software testing for more than 30 years. Dot is co-author with Tom Gilb of "Software Inspection", co-author with Mark Fewster of "Software Test Automation", and co-author with Rex Black, Isabel Evans and Erik Van Veenendaal of "Foundations of Software Testing". She is currently working on a new book "Experiences in Test Automation" with Mark Fewster, to be published in 2010.

Dot was Program Chair for EuroSTAR in 1993 and 2009. She has been on the boards of a number of conferences and publications in software testing. She was a founding member of the ISEB Software Testing Board and was a member of the working party that developed the ISTQB Foundation Syllabus. She founded Grove Consultants in 1989, and in 2008 returned to being an independent consultant. She is a popular and entertaining speaker at conferences and seminars world-wide and holds the European Excellence Award in Software Testing. Her main hobby is choral singing.

Day 1 Sessions

10:40a - 11:50a

A Framework to Evaluate Testing Skills Effectiveness

Testing is an empowering role because there is ambiguity allowing the engineer to develop their own approach to the testing problem. In recent years, R&D projects at HP have shifted from large multi-year projects to targeted short-term projects. When multi-year projects were the norm, teams were built based upon a narrow range of critical skills. Recently, projects have become focused on short-term deliverables which can generate revenue quickly. In such environments, the value of having a flexible team of empowered individuals cannot be overlooked.

Building a team of individuals with strong traits in technical acumen, communication, collaboration, and leadership has been the basis of the HP NAS team's framework. The team has demonstrated their flexibility and usefulness through the delivery of high quality results supporting four different product families in just two years. The framework has been applied extensively in Agile environments.

Framework to assess testing skills: We discuss the Framework that evaluates engineers across four dimensions.

Bridge from Practical to Theory: We continue the discussion on how this framework has been successfully applied by a highly experienced test lead.

Theoretical Model to Measure Testing Skills Effectiveness: We then close with how the Program Manager measures the effectiveness of the framework.

Alan McKellar is a certified Project Management Professional (PMP) who has led technical teams for over 16 years. He began his career in the United States Navy then led customer-focused IT projects at Procter & Gamble and Hewlett Packard. Six years ago he joined HP's R&D arm and now leads software testing efforts for the software arm of StorageWorks Division.

Alan holds a MBA from the University of Notre Dame, Mendoza College of Business. When he and his teams are not "attacking" products, he enjoys leisure time with his family, photography and reading.

Kim Jensen has been with HP R&D for 20+ years. As a software engineer, she has done current product engineering, systems integration testing, development of graphics software, 3rd party management to enable customer specials, integration testing and enablement of Linux on HP Workstations. She has worked with remote teams in India and Taiwan as well as across the US. Most recently, she joined Alan's QA team, leading functional and integration testing of Network Attached Storage.

Kim holds a Master Degree in Computer Science from Colorado State University and a BS in Computer Science and Mathematics from University of California at Davis. In her spare time, she enjoys mountain biking and skiing with her family, and

Stuart Bobb has25 years of experience in the computer industry. As a software tester, he has tested business server and workstation operating systems.

As a software developer, he has delivered software ranging from Unix kernel code to system administration GUIs. He has over 14 years of experience leading complex research & development projects as both a project and program manager.

Stuart's project and program management experiences have included high level bundled software solutions as well as the lowest levels of the hardware and software interface.

In his most recent role, Stuart has been deeply involved in the work surrounding two small company acquisitions and their approaches to software quality.

He holds a BS in Computer Science and a PMP certification from PMI.

Day 1 Sessions

1:20p - 2:30p

Experiences and Insights of a Novice Agile Software Tester

Often at conferences domain experts will present brilliant insights and observations that help people understand how to effectively hone their skills as software testers. Instead, why not listen to one where a novice reviews the assumptions, challenges, and critical lessons he's learned in the first few months of being an agile software tester! In this session you will:

- Learn about horrible mistakes that have been made
- Learn what skills a novice should develop in order to be more effective
- Learn what mindsets and attitudes were helpful
- Hear a grown man cry. Maybe.

Disclaimer: The presenter is a novice. He will be wrong. But he will be right, potentially at the same time. At the very least he promises to try to be amusing.

Zachary Spencer started off writing programs in BASIC at the age of 12. Since then he has learned that breaking diagnosing software can be as fun as creating it. He has over 5 years of experience as a professional software developer creating everything from custom content management systems to RESTful APIs.

He currently works at Pillar Technology as a software tester, writes a blog at http://www.zacharyspencer.com/, hosts a podcast at http://vekanduit.com and spouts random gibberish as @zspencer on Twitter.

1:20p - 2:30p

Exploratory Test Automation

Exploratory software testing treats test-related learning, design, and execution as mutually supportive activities that run in parallel throughout the project. As with manual tests, automated tests are exploratory to the extent that they focus on revealing new things about the software under test. (Regression tests illustrate the opposite of exploration. They look for the same things in the same ways they did last time.) Some people have the misimpression that exploratory tests must be manual, or that the idea of automated ET is new. We started teaching some types of automated exploratory test techniques ("high-volume test automation") in the 1990's. These hunt bugs that are virtually impossible to expose or isolate in manual testing. There are many other exploratory techniques. This talk presents a framework for thinking about the broad universe of automated ET, with examples. Tomorrow's keynote follows up this introduction by illustrating how automated ET applies to a specific area, high-stakes financial modeling.

Cem Kaner has pursued a multidisciplinary career centered on the theme of the satisfaction and safety of software customers and software-related workers. With a law degree (practice focused on the law of software quality), a doctorate in Experimental Psychology, and 17 years in the Silicon Valley software industry, Dr. Kaner joined Florida Institute of Technology as Professor of Software Engineering in 2000. Dr. Kaner is senior author of three books: *Testing Computer Software* (with Jack Falk and Hung Quoc Nguyen), *Bad Software* (with David Pels), and *Lessons Learned in Software Testing* (with James Bach and Bret Pettichord). At Florida Tech, his research is primarily focused on the question, *How can we foster the next generation of leaders in software testing?* See TestingEducation.org for some course materials and the proposal to the National Science Foundation for a summary of the course-related research.

Douglas Hoffman is a management consultant and trainer in strategies and tactics for software quality assurance with over 30 years experience. The President of the Association for Software Testing (AST) and a Fellow of the ASQ (American Society for Quality), he holds degrees including MBA, MSEE, and BACS. He is certified by ASQ as a Software Quality Engineer and as a Manager of Quality/Organizational Excellence. Douglas is a founding member, past Chair, and current Treasurer of SSQA (Silicon Valley Software Quality Association), past Chair of the Silicon Valley Section of ASQ, a founding member for AST, Invited Speaker Chair for PNSQC, and a member of ACM and IEEE. He has spoken at dozens of conferences and has been Program Chair for several international conferences on software quality. He has also been an active participant in the Los Altos Workshops on Software Testing (LAWST) and dozens of the offshoot workshops.

Day 1 Sessions

1:20p - 2:30p

Panel Discussion on Assessing Testing Skill During the Job Interview

As testers, we want hiring managers to recognize our testing skills so that we can get and keep great testing jobs. As test managers, we want to assess a job candidate's testing skills, so that we can hire and keep great testers. How does this play out in the real world?

At CAST 2010, we've assembled a panel of practicing tester interviewers, and we'll ask them to share their experiences and practical advice. We won't talk about topics such as how to find candidates, how to assess cultural fit, or how to end an interview early; instead, we'll keep the focus on assessing testing skills, and talk about examples and concrete experiences.

David Liebreich has been interviewing testers for over 10 years, and has been interviewing as a tester for over 20. He's been involved in the interviewing process at small startups and large companies, and loves to talk about making the interview process better. Dave also does some testing.

2:40p - 3:50p

Cutting the Mustard – Lessons Learned in Striving to Become a Superstar Tester

As IT professionals we strive to deliver quality projects to our business stakeholders and end users. We focus on improving our project delivery by examining our development processes, encouraging continuous learning of team members, and spending time on project retrospectives to look for areas of improvement. Sometimes as we strive to improve things external to us we find that we cannot always effect change.

There is something we do have control and the ability to change, ourselves. I have found that as I continually strive to become a superstar tester, I am continuously challenging myself to grow. This presentation will examine what it means to “Cut the Mustard” and will challenge attendees to cut the mustard in their own ways. By using the same continuous improvement skills we often focus externally, we can refocus that energy inwards on ourselves and redefine our own excellence. Leveraging our role in the industry of software quality and focusing first on ensuring quality within ourselves and all we do, we can effect positive change and transformation within the teams we work with.

Key points during this presentation:

- Examining traits of superstar testers and what it means to “Cut the Mustard”;
- How the essence of continuous improvement can be leveraged for self-improvement;
- Analyzing the pathways for growth;
- Sharing inspirational stories of incremental to monumental team transformations by individuals through their actions.

Nancy Kelln is an independent consultant with 12 years of diverse experience within the IT industry. Nancy is motivated by working with teams who are implementing or enhancing their testing practices; providing adaptive testing approaches in both agile and traditional testing teams. She has coached test teams in various environments and facilitated numerous local and international workshops and presentations. She is an active member of the Calgary Software Quality Discussion Group, Association for Software Testing and the Scrum Alliance and has co-founded the Calgary Perspectives on Software Testing Workshop (POST) with Lynn McKee. Nancy has also been published in various software testing magazines. You can reach Nancy online at www.unimaginedtesting.ca.

Day 1 Sessions

2:40p - 3:50p

Adopting and Adapting Open Source Testing Tools

A skill in high demand is the ability to automate your work using popular, free, open source testing tools. TestLink, Selenium, FitNesse and Chainsaw are four universal tools that will help automate any software testing project.

Downloading and installing each tool requires only a few minutes. But that is far from the most important step. Since every software project is different a key to success is to think of unusual ways to adapt tools for your project's needs. Who would have thought that Microsoft Excel – a spreadsheet engine – would become a popular tool for writing test procedures or test reports? We will show how to install each tool, a simple example of using it, and how we adapted these tools as we test embedded systems.

TestLink is a test case manager. Its test reports are available via the web and results are easily compared between different builds. Whether testing is manual or fully automated this tools organizes the test cases and test runs. Selenium was designed to automate testing browser based applications. Its playback and record feature is invaluable for automating the set-up of any test relying on servers. The tables in FitNesse are great for designing and building integration tests. Almost all systems output strings of text – in logs, console messages or to files. Chainsaw is the tool for automatically analyzing large sequences of output messages.

To get the most out of these tools you should join their open source community. Forums, FAQs and daily postings keep you informed. Each open source project is different but there is etiquette to follow. We will talk about our experience posting requests, filing bugs, contributing code patches and suggesting enhancements.

Scott Allman's daily work as a QA/Test manager inspires his writings and presentations about software test automation. A software developer since the late 1960's his career spans universities, startups, aerospace, consulting, and big corporations working on four continents. He is a long-time member of SQuAD, Software Quality Assurance of Denver, Colorado, USA.

2:40p - 3:50p

Downsizing, Off shoring, Outsourcing: What Skills are Needed Where?

With the pressures to downsize North American teams & offshore or outsource testing, there is a real need to determine what skill sets are needed in the different locations. When determining who to layoff and who to keep, you need to look at the inventory of skills each individual can bring to the team. Determining which skills are more easily outsourced is important. It isn't always the top testers that you need to keep; it's the testers with good communication skills, knowledge of your practices, and ability to train your new staff. Looking at what skills we have, what skills we are missing, what skills are now surplus, we can determine what the skill set is needed and then determine where these skills should be.

Jane Fraser; Test Director, Electronic Arts: As an industry veteran with more than fifteen years of experience, Jane Fraser brought her expertise from the ecommerce and telecomm industry to the online gaming world when she joined Pogo in 2004. In her role as QA director, Jane oversees the QA Department, which includes Pogo.com, Club Pogo, Facebook games, iPhone games and a downloadable business. She has successfully launched more than sixty games in six territories including Scrabble and Battleship. During her time with Pogo, Jane has provided leadership, established testing process, and managed a team of testers, which she has grown from six to a robust team of eighty in six countries. Prior to joining Pogo, Jane tested products from Word Processing and Desktop Publishing, cell phone services, ecommerce site, and ticket forwarding and management product.

Day 1 Sessions

4:10p - 5:20p

Internationalization and Localization Testing Skills

Internationalization and localization testing involves a unique blend of application domain skills, technology skills, language skills and testing skills.

This presentation reviews:

- Test design
- Test management
- Test workflow
- Bugs, reporting, advocacy, workflow

The presentation demonstrates how you can test in all target languages and on all target platforms in a cost effective manner. You will learn how to balance domain, testing, technical and language skills in set up a testing organization along with associated workflow, planning and management structures. You will learn about deciding what to test and how to test it. Plenty of examples from real projects are used to illustrate the concepts presented.

Matta Saikali has more than ten years experience in internationalization and localization testing. His testing experience covers more than 30 languages including European, Asian, Arabic, Hindi, etc.

Formerly Director of Software Quality Assurance at Gemplus, Matta built up and managed a team of 50 SQA professionals responsible for testing globalized Windows applications and embedded systems in European and Asian languages.

As Director of SQA at Purkinje, Matta managed the testing team for a multilingual multi-user client-server application for clinical data entry.

Matta was also SQA team leader at ALIS where he was involved in testing all ALIS products, notably their Arabic/Farsi product line.

4:10p - 5:20p

Coping With Complexity: Lessons From a Medical Device Project

Medical devices can involve a lot of risk, thousands of pages of standards, heaping crate-loads of documentation, traceability of everything to everything, and developers who want to skip along at mach speed as if they were developing "Google Buzz" instead of, say, a cardiac arc welding system. This is a talk about how one team dealt with that complexity. Hints: use dependency graph diagrams that summarize the testing problem on one page, avoid procedural test documentation and use testing playbooks instead, develop the playbooks progressively, use session-based test management with exploratory testing, insist on comprehensive function-level logging, don't just question requirements-- rewrite them, while you're at it, rewrite the standards, too, and of course, tell management that your testing will be a lot more focused and streamlined if they help you understand the internals of the system.

Yaron Kottler is a senior test specialist and the CEO at QualiTest USA, part of the QualiTest Group. Yaron has over a decade of QA and testing experience in both technical and management roles. A speaker at international testing conferences, instructor and hands-on mentor at dozens of organizations in the US, Europe and the Middle East, Yaron is an expert on such topics as: Test process improvement, Load & Performance testing, KDT Test Automation and Exploratory Testing.

Yaron enjoys working with high-potential and driven testing professionals to explore new and better ways of testing and believes that the most important quality in an engineer is the ability to learn.

Day 1 Sessions

4:10p - 5:20p

Unifying Industrial and Academic Approaches to Domain Testing

The most widely used technique in software testing is called Equivalence Class Analysis. Or Category Partitioning. Or Boundary Value Testing. Or Domain Testing. It's a black-box test technique—except when it's used as a glass-box technique. Its focus is on input variables. Or output variables. Or variables that hold results, or are impacted by variables that hold results. I've been trying to muddle through this literature for a decade, coming at it with a practitioner's bias and wondering whether the academics really had anything useful (or comprehensible) to offer. Sowmya Padmanabhan did her M.Sc. thesis research on this and has just co-authored the *Domain Testing Workbook* with me, which will be published soon. This talk will present a worksheet that we've developed for planning and creating domain tests of individual variables or multiple variables that are independent or linearly or nonlinearly related. I'll brush on some of the theory underlying the approach, but mainly I want to present some of the lessons that this work brought home to me about skilled (contrasted with inexperienced or unskilled) domain testing.

Cem Kaner has pursued a multidisciplinary career centered on the theme of the satisfaction and safety of software customers and software-related workers. With a law degree (practice focused on the law of software quality), a doctorate in Experimental Psychology, and 17 years in the Silicon Valley software industry, Dr. Kaner joined Florida Institute of Technology as Professor of Software Engineering in 2000. Dr. Kaner is senior author of three books: *Testing Computer Software* (with Jack Falk and Hung Quoc Nguyen), *Bad Software* (with David Pels), and *Lessons Learned in Software Testing* (with James Bach and Bret Pettichord). At Florida Tech, his research is primarily focused on the question, *How can we foster the next generation of leaders in software testing?* See TestingEducation.org for some course materials and the proposal to the National Science Foundation for a summary of the course-related research.

Sowmya Padmanabhan currently works as Program Manager, at Hotmail, Microsoft. She has been with Microsoft for 5 years. Prior to that, she worked at Texas Instruments. She has over 8 years of industry experience that has revolved around product management, development and testing. She has shipped several desktop, embedded and web based consumer products that are international in scope. Sowmya has experience with varied product development methodologies ranging from waterfall to agile methods such as Scrum. She has Master's degree in Computer Sciences with specialization in Software Testing. She did her M.Sc. thesis research on domain testing and is the co-author of the Domain Testing Workbook with Cem Kaner, to be published soon by AST Press.

Day 2 Sessions

9:40a - 10:50a

Testing in Large-scale Scientific Computation: The Short Circuit Method

We consider the problem of testing large-scale scientific computations, which are typical in the case of physics, weather prediction, computational fluid dynamics, etc. These are characterized by large programs which run for a significant time (e.g. 100 hours) usually in large/fast/parallel computers. The ones studied here are those which produce a relatively small output compared to the amount of input data and/or computing time.

For these problems we have no external way to decide if the results are correct or not. In terms of software testing, we have no oracle. In some cases the errors may be discovered later, but their cost may be intolerable, e.g. designing an airplane wing does not tolerate errors even if those may be discovered during usage.

We present a typical diagram of the main steps present in massive scientific computation. These many steps are typical of function optimization or the solution of differential equations. Most notably, these steps come from a variety of sources, many of them outside the control of the programmer.

The main idea is to verify some property of the results with the original equations. That is, connect the source description to the final results. Of course we are not going to recompute them; the idea is to verify properties that the results should satisfy given the original equations. This may require some ingenuity and some minor additional computing. Two examples of such short circuits are explained in some detail.

This approach, to be effective, requires high domain and technical skills of the testers. The software, hardware, packages, libraries, parallel computing are all suspects. It is a very multidisciplinary scenario, where the programmers do not have testing culture, maybe not even software engineering culture. But they have the domain knowledge which is needed to build effective short-circuits.

Mónica Wodzislawski manages the Functional Testing Laboratoy of the Software Testing Centre, Montevideo, URUGUAY, since its creation, in 2004. She has a vast experience as quality assurance and testing local and regional consultant, as well as managing software projects. Mónica teaches Software Engineering and Testing at the University.

Gaston Gonnet is a computer science professor since 1977. He is best known for the creation of the Maple computer algebra system and an electronic version of the Oxford English Dictionary. Gonnet is presently a professor at the Institute of Scientific Computation, ETH Zurich, Switzerland.
He is the Director of the Computational Biochemistry Research Group, where has developed the Darwin system and server for these computations.

9:40a - 10:50a

What Haven't You Noticed Lately? Building Awareness in Testers

"What haven't you noticed lately?" Marshall McLuhan is said to have asked this paradoxical question—a vital one for testers, because it prompts more questions about things that testers could and should notice. Great testing is about noticing things and asking questions about them. Have you ever found a problem in a program without using a named testing technique or found that some testers seem to be magnets for bugs, seeing things that you don't? As a test manager, do you wish that your team could look beyond the obvious and discover more defects? Have you noticed that artists, comedians, designers, and novelists notice things that the rest of us don't notice?
>
> Michael Bolton believes that many important problems in our products are not found by using formulaic testing techniques. Instead, they are discovered through a rich set of cognitive skills that can be taught and learned. Michael discusses the importance of diversification, focusing and defocusing, rapid cognition, emotional engagement, and collaboration—and provides you with ideas and tools to use them. Learn about testing approaches that take advantage of the minds of individual testers to liberate us from rote testing work and provide far more valuable information about the state of the product and the project.

Michael Bolton has been teaching software testing on five continents for ten years. He is the co-author (with senior author James Bach) of Rapid Software Testing, a course that presents a methodology and mindset for testing software expertly in uncertain conditions and under extreme time pressure. He has been Program Chair for the Toronto Association of System and Software Quality, and Conference Chair (in 2008) for the Conference of the Association for Software Testing, and is a co-founder of the Toronto Workshops on Software Testing. He wrote a column in Better Software Magazine for four years, and sporadically produces his own newsletter.

Michael lives in Toronto, Canada, with his wife and two children. He can be reached at mb@developsense.com, or through his Web site, http://www.developsense.com

Day 2 Sessions

9:40a - 10:50a

Communicating With Non-Testers

This session will help you communicate clearly, precisely and effectively by considering the context of the communication and the needs of your audience - even when that audience includes non-testers.

Talking to non-testers requires a lot more thought and a lot more explanation than talking to testers who share your background. Management wanting status reports, release teams asking about when something will ship, developers and semi-technical customers wanting analysis of a defect or risk: all these are non-testers who need information presented in a way that lets them make good decisions. Communicating test concepts and outcomes to non-testers is a skill that turns a good tester into an invaluable team member.

I will share examples of communications about the same (real) project intended for several different audiences, including:

- two different status dashboards (one for development and internal management, one for release teams and upper management)
- a defect summary of a technical issue for customers and developers
- a risk analysis for a feature
- a test estimate with reasoning and cost breakdown
- two different test plans (one for internal use, one for client consumption)

For each example, the session will consider:

- the intent of the communication
- the audience
- selecting useful content
- what to leave out
- conveying uncertainty, risk and estimates
- what works

Catherine Powell has been testing and managing testers for about ten years. She has worked with a broad range of software, including an enterprise storage system, a web-based healthcare system, data synchronization applications on mobile devices, and web apps of various flavors. She is an author and a formal mentor to testers and test managers.

Catherine focuses primarily on the realities of shipping software in small and mid-size companies. Specifically, she highlights and works to explicate the "on-the-ground" pragmatism necessary for testers to work effectively with both software and humans from product definition through release, and in the field.

Day 2 Sessions

1:00p - 2:10p

The Art of Visualization

Good testers use their experiences and understanding of a product to apply oracles and heuristics that guide testing in uncovering problems and to communicate with a variety of stakeholders.

Great testers go beyond.

Great testers are skilled in employing different techniques to visualize requirements, user stories, designs, and problems to understand what they are working with. They use visual models to comprehend what the customer really wanted, brainstorm design solutions that are low risk yet high value implementations, and understand root causes for issues and risks. They recognize that the simplicity of a visual aid can disseminate information more accurately than the spoken and written equivalent. Great testers are talented in using such visual representations when collaborating and communicating with a variety of stakeholders so participants arrive at a shared understanding.

In this session we will investigate different methods testers can use to efficiently create visual representations of software requirements, solutions, and problems. These skills will help improve your effectiveness in testing, and allow you to add more value in conversations with stakeholders.

Selena Delesie is a consulting software tester and agile coach with 10 years of experience testing, managing, and coaching in software, testing, and agile practices for leading-edge technologies. Her experiences ignited her passion for creating empowered and collaborative organizations, and in discovering more effective ways to create high quality products. She facilitates the evolution of good teams and organizations into great ones using individualized and team-based coaching and interactive training experiences.

Selena is co-founder and host for the Waterloo Workshops on Software Testing, past chair for the Kitchener-Waterloo Software Quality Association (KWSQA), and can be reached via her blog and website: www.selenadelesie.com.

1:00p - 2:10p

Mining for Gold: Bug Isolation

Software testers typically write bug reports. Testers see an error message or witness unacceptable behavior in applications and create bug reports. But is the error message a real bug? Why does a web page load slowly due to a single input? Is the input a bug?

This presentation will not only address general testing practices into finding bugs but testers will learn to locate the mother lode of triggers. Go beyond the symptoms like error messages and explore behavior patterns to discover gold mines of information. Molly will expand on the many benefits when software testing resources can provide more descriptive information to Development. Attendees will learn how to recognize triggers of bugs rather than report just symptoms.

Real life situations will be shared with attendees along with exercises to expand attendees' skill set. When an error condition exists, Jean Ann will explain what kinds of variables can be added or detracted in reproducing the bug which will expose more information about the behavior.

Finally what knowledge does a gold mining bug reporter need? Throughout the session, Jean Ann & Molly will use personality traits and helpful technical skills to further expand upon the golden nuggets of bug isolation capabilities.

Jean Ann Harrison is a Lead Quality Assurance Engineer at CardioNet, Inc providing ambulatory cardiac monitoring service for physicians' patients. Jean Ann is currently the software quality assurance lead on the next generation mobile heart monitor device and has been the lead on all embedded software testing at CardioNet. Jean Ann's background also includes a variety of projects of large multi-configured applications for client/server, web, Unix and mainframe systems. Her experience is primarily manual testing with occasional automation and a strong focus on building quality into design. Constantly working to perfect her craft, Jean Ann attends and presents at conferences, takes various courses, networks and actively participates in software testing forums. She believes software testing takes daily practice to contribute to a project's success.

Molly Mahai has over 15 years in the software industry and is currently QA Manager at the Arizona State Retirement Systems. After obtaining a bachelor's degree in computer science, Molly worked as a developer for 9 years before entering management. After a year of managing developers, Molly has found her place managing QA Engineers and Testers. Molly has a Bachelor's in Computer Science and a Masters in Business Administration.

Day 2 Sessions

1:00p - 2:10p

Dealing with Passionless Testers

How often have you been in a test team surrounded by passionless testers? What does that do to your passion about testing? There is a great risk that your fire will slowly fade away.

Being surrounded by passionless testers puts you at a crossroad and either drags you into trying to help and sort out the problems, or leave it be. It is so easy to slowly decay into a zombie without realizing it and that is a very dangerous situation to be in.

In this highly interactive and fun session we will try to find the causes and problems that lead to loss of passion. The game plan is to ask the audience to look for the different signs of lost passion or right out obstruction and then have a role play - a scenario that each of us could meet at our daily job - on stage. Through participation the audience will try to help out in the scenario and together we will learn how to deal with the passionless tester and figure out how we could help finding the passion again - for ourselves and our colleagues

Henrik Andersson is one of the leading European consultants in the field of testing in Agile environments and the use of Exploratory Testing. In 2008 he co-founded House of Test, a testing consultancy and outsourcing company based in Sweden and China.

His main areas of focus are in Test Improvement, Exploratory Testing, Session Based Test Management, Context-Driven Testing, Risk Based Testing and Agile Testing. Henrik works with helping organizations in transitioning from traditional development processes like waterfall into Agile processes such as Scrum.

Carsten Feilberg is a senior consultant at Strand & Donslund A/S in Denmark. He has a wide set of interests ranging from enterprise architecture to process management, problem solving and testing - all the way to ancient Egyptian art and heading for the coast to do some fishing. He is also a regular conference speaker and blogs on http://carstenfeilberg.blogspot.com. He is constantly advocating for the context-driven point of view and encouraging use of exploratory testing and session-based test management. He loves to discuss testing (and any other of his many interests) and explore new options.

2:20p - 3:30p

Testability and Technical Skill

This session draws from my testability experiences as both a tester and a developer, and promotes the idea that a tester's technical skill substantially impacts system testability. My experiences include a futile attempt at convincing a development team to build a more testable system, and an eye-opening assignment as a developer in the same organization.

Testability is often defined as the ease with which a tester can observe and control a system. The importance and perception of testability can differ according to one's role on a project. However, testability is not merely a system property; it describes a relationship between properties of the system, the test environment, and the tester.

I will present examples to illustrate the exposure of testability through technical knowledge and skill for an ASP .Net web application. Other examples demonstrate how a system's design can be leveraged to improve testability. I also offer advice for testers who seek to utilize and improve their technical skills.

Greg McNelly: Computer programming has been a passion of mine since 1982, and my profession since 1993. My programs have helped people insure automobiles, predict laboratory test results, precision-align machinery, process payrolls and practice math facts.

In 2003, I became fascinated with test automation as a type of programming; and, shortly thereafter, its limitations led me to a tremendous respect and passion for the cognitive challenges of testing. Now I work with project teams seeking to leverage testing as an effective component of their overall software development process.

Currently, I am an in-house software development consultant at Progressive Insurance, in Mayfield Village, Ohio. This is also where I live with my wife and two daughters.

Day 2 Sessions

2:20p - 3:30p

Reporting Skills and Software Testing

There are three R's that I learned from newspaper reporting that have helped me in becoming a better software tester: rapport, record, and report.

Rapport: I need to be able to gather information from a variety of people. I've become skilled at opening up channels of communication and sometimes with the most introverted of software developers and system architects.

Software testers need to gather information; we need to be able to interview our team mates to learn more about the products we're testing. How do we gain the artful skills of interviewing people for information?

Record: Testers can benefit from taking good notes before, during and after testing. What are "good" notes? And how do we become adept at recording information?

Before we test, we're likely in information gathering mode. While we're talking with a developer or product designer, what types of information should we record? During testing, we might record our observations and additional ideas for testing. We might record details about a defect. After a testing session, we might record yet more information and ideas for further and future testing. How do we record notes through each of these scenarios in an effective way that doesn't intrude upon our work?

Report: What do we report about product status - just the facts?

We test, we learn. And we gain opinions. How do we remain objective? How do we report project status objectively? Do we know when we've developed a bias? Does it matter if we have a product opinion? How do we deliver product news?

In my presentation, I want to talk about these three skills and offer ways for software testers to practice, acquire, and hone these skills.

Karen N. Johnson is an independent software test consultant. She is a frequent speaker at conferences. Karen is a contributing author to the book, *Beautiful Testing* released by O'Reilly publishers. She has published numerous articles and blogs about her experiences with software testing.

You can visit her website at: http://www.karennjohnson.com She is the co-founder of the WREST workshop. More information on WREST can be found at: http://www.wrestworkshop.com/Home.html

Day 2 Sessions

2:20p - 3:30p

Communication Chameleons

Some testers enjoy working in isolation to critically explore software to find bugs. Other testers work in solitude to find bugs while repeatedly running the same test scripts. The very best testers fit neither of these groups. While they maintain intense focus in their test activities, they also invest time in talking with colleagues about their work and the product – and are able to do so beautifully, regardless of who they speak with.

These testers are chameleons. They communicate effectively with different stakeholders to engage in valuable conversations, for example:

- Other Testers: In planning test focus and comparing notes on product observations
- Programmers: In discussing design implementations and bug fix solutions
- Management: In identifying risks, providing status, and sharing plans
- Product managers: In providing results of research data to guide roadmaps toward viable and value-adding products
- Executives: In summarizing project progress, research endeavors, business impact, and identifying technical boundaries for future product visions

In this session we will look at personal experiences to explore the approaches testers use to communicate with different stakeholders in more effective and value-adding ways.

Selena Delesie is a consulting software tester and agile coach with 10 years of experience testing, managing, and coaching in software, testing, and agile practices for leading-edge technologies. Her experiences ignited her passion for creating empowered and collaborative organizations, and in discovering more effective ways to create high quality products. She facilitates the evolution of good teams and organizations into great ones using individualized and team-based coaching and interactive training experiences.

Selena is co-founder and host for the Waterloo Workshops on Software Testing, past chair for the Kitchener-Waterloo Software Quality Association (KWSQA), and can be reached via her blog and website: www.selenadelesie.com.

3:50p - 5:00p

Assessing Your Value as a Tester

Testers aim to be valued, respected members of our teams and by our managers and organizations. We pursue excellence in our craft by honing our skills and diversifying our techniques. Our goal is to deliver value through the quality of the information we provide our stakeholders. How do we know if our work is viewed as valuable? What criteria are we applying to determine if we are adding value to our teams? Have we identified our diverse clients and do we understand their needs and perspective on testing value?

Value is subjective. Individual perspectives on value differ and can be influenced by organizational goals, project mandates, and functional roles. To assess the value we are providing it is imperative to gather feedback from our clients. As testers, our clients may include business analysts, designers, programmers, writers, trainers, support teams, project managers, customers, functional managers, and stakeholders. The needs and perspectives of each client will vary and we need to understand these differences in order to align ourselves and effectively deliver value.

Lynn McKee is an independent consultant with 15 years 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. You can reach Lynn online at www.qualityperspectives.ca.

Day 2 Sessions

3:50p - 5:00p

Nice Words are Not Enough

Though words like session-based test management and exploratory testing are popular, in many situations they are not enough. Due to fear, insecurity and lack of knowledge suppliers and customers both revert to waterfall thinking, which induces a false sense of security and safety. Customers want waterfall because they believe it will solve their problems like scope creep, auditable test results and requirements traceability. They see it as a proven method for developing software that will ensure success. And suppliers tend to fuel this belief, by setting up waterfall-plans.

And when we enter the stage saying, let's test it, but we won't write down all test cases in advance, they get all worried and fearful.

Our experiences, albeit from opposite ends of the world, have been around facing these fears and attempting different ways of dealing with them. We would like to share this experience by demonstrating an example, following a test manager's attempt to introduce session-based test management in a waterfall-minded environment. There were pros and cons to the chosen strategy and some interesting observations on the effects, which we look forward to present and discuss with the audience.

Carsten Feilberg is a senior consultant at Strand & Donslund A/S in Denmark. He has a wide set of interests ranging from enterprise architecture to process management, problem solving and testing - all the way to ancient Egyptian art and heading for the coast to do some fishing. He is also a regular conference speaker and blogs on http://carstenfeilberg.blogspot.com. He is constantly advocating for the context-driven point of view and encourage use of exploratory testing and session-based test management. He loves to discuss testing (and any other of his many interests) and explore new options.

Louise Perold first attended CAST in 2007 where she heard about Session based testing and decided to try it out for herself. Today, she is a passionate believer in context-driven testing and is enthusiastically refining her approach to Session based testing. Louise spends most of her time leading and mentoring test teams within the Financial services industry in Johannesburg, South Africa. This provides the ideal platform to catch bugs with context-driven testing. (The rest of her time is spent delving into the fast-paced social life that living in Joburg demands).

3:50p - 5:00p

Using a Wiki for Communication and Collaboration

Marlena Compton wants to share her experiences of using wikis for software testing and she also wants to hear yours. This session will focus on using wikis in widely differing software environments to bring conversation and collaboration into the software development process. Marlena began using wikis in a waterfall environment and has since moved to using and testing wikis in an agile environment. She will share:

- how wikis can help to gently introduce agile principles and values to non-agile teams
- how she used James Bach's Low-Tech testing dashboard to delight her boss and improve her exploratory testing behind the waterfall
- How she currently uses a wiki as part of an agile testing process
- What to watch out for when using wikis for testing

Testers are encouraged to bring their own experiences of using wikis for software testing to the session.

Marlena Compton is a software tester for Atlassian Software in Sydney, Australia where she tests their wiki application, Confluence. She has been testing software for 4 years and recently completed a Masters of Science in Software Engineering at Southern Polytechnic State University. Her thesis handled the topic of using data visualization for software testing. She blogs about software testing at http://marlenacompton.com and participates in the Australia/New Zealand chapter of Weekend Testing. In her spare time she enjoys hiking the beaches of Sydney.

After CAST Sessions

Thursday, August 5

8:00a - 8:30a	**Breakfast** [Oak]	
8:30a - 10:00a	**BBST Instructor Training** Rebecca L. Fiedler, Cem Kaner [Blue Spruce]	**Context-Driven Performance Testing** Eric Proegler, Paul Holland [Elm]
10:00a - 10:20a	**Break**	
10:20a - 12:00p	**BBST Instructor Training** Rebecca L. Fiedler, Cem Kaner [Blue Spruce]	**Context-Driven Performance Testing** Eric Proegler, Paul Holland [Elm]
12:00p - 1:00p	**Lunch** [Oak]	
1:00p - 3:00p	**BBST Instructor Training** Rebecca L. Fiedler, Cem Kaner [Blue Spruce]	**Context-Driven Performance Testing** Eric Proegler, Paul Holland [Elm]
3:00p - 3:20p	**Break**	
3:20p - 5:00p	**BBST Instructor Training** Rebecca L. Fiedler, Cem Kaner [Blue Spruce]	**Context-Driven Performance Testing** Eric Proegler, Paul Holland [Elm]

After CAST Sessions

Full Day

Live! AST Instructors' Orientation Course Jumpstart Tutorial

You've read about AST's free software testing courses. Now find out how you can get involved in teaching these for AST, for your company, or independently. This workshop will use presentations, lectures, and hands-on exercises to address the challenges of teaching online. (Bring your laptop and wireless card if you can.) The presenters will merge instructional theory and assessment theory to show you how they developed the AST-BBST online instructional model. Over lunch, chat with AST members who are working on AST Instructor Certification.

This workshop satisfies the *Instructors' Orientation Course* requirement for prospective AST-certified instructors.

PREREQUISITE: Successful completion of BBST Foundations

Your registration includes lunch.

Learn more about becoming an AST BBST instructor at http://www.satisfice.com/kaner/?p=41

This workshop is partially based on research that was supported by NSF Grants EIA-0113539 ITR/SY+PE: "Improving the Education of Software Testers" and CCLI-0717613 "Adaptation & Implementation of an Activity-Based Online or Hybrid Course in Software Testing." Any opinions, findings and conclusions or recommendations expressed in this workshop are those of the presenter(s) and do not necessarily reflect the views of the National Science Foundation.

National Science Foundation
WHERE DISCOVERIES BEGIN

For the past 25 year years, **Rebecca Fiedler** has been teaching students of all ages - from Kindergarten to University. She is interested in how people learn and how technology can make educational efforts more effective and more accessible to more people. Lately, she's been trying to figure out how to make online teaching more effective. In the testing community, Dr. Fiedler works with Cem Kaner on the Black Box Software Testing (BBST) courses and AST's Education SIG. She is also a regular attendee at the Workshop on Teaching Software Testing.

Cem Kaner has pursued a multidisciplinary career centered on the theme of the satisfaction and safety of software customers and software-related workers. With a law degree (practice focused on the law of software quality), a doctorate in Experimental Psychology, and 17 years in the Silicon Valley software industry, Dr. Kaner joined Florida Institute of Technology as Professor of Software Engineering in 2000. Dr. Kaner is senior author of three books: *Testing Computer Software* (with Jack Falk and Hung Quoc Nguyen), *Bad Software* (with David Pels), and *Lessons Learned in Software Testing* (with James Bach and Bret Pettichord). At Florida Tech, his research is primarily focused on the question, *How can we foster the next generation of leaders in software testing?* See TestingEducation.org for some course materials and the proposal to the National Science Foundation for a summary of the course-related research.

After CAST Sessions

Full Day

Context-Driven Performance Testing

Performance Testing measures whether software meets certain non-functional software requirements, such as response time, concurrency, scalability, reliability, resilience, and other characteristics of a software system that are essential for user experience. This style of testing is usually accomplished with expensive automated tools, using scripted activities to construct a simulation of many people using a software system. Like other kinds of testing, it can seem that "everyone knows" the "right way" to conduct performance testing. There is a widely duplicated model that focuses performance testing software at the end of the development cycle, shortly before deployment, attempting to replicate the expected production workload with an expensive, proprietary load tool. This model proposes this simulation of production workload reduces risk by causing similar levels of computing resources to be consumed and, through use of software with many users activities, simulated.

Like other kinds of testing, it can be demonstrated that a prescriptive, cookbook-style approach can be somewhat successful, but testing well and providing the most complete information requires thoughtful planning matched with the context in which the tests are conducted. While simulation against deployment-ready code can reduce risk significantly by itself, there are additional approaches extending the same expensive load tools, test artifacts, and testers to provide additional feedback and value throughout the development lifecycle. Depending on the people, tools, time, development model, and other variables, these other approaches to performance testing can even be more valuable than the simulation approach. In this tutorial, we will share some ideas about how performance testing can be evolved past the "dress rehearsal" model and discuss performance testing beyond capture-replay and requirements definition. Additional topics include:

- Other times, places, and types of performance tests to perform; test early and often to find issues early enough to fix them.
- Why the choice of tool is not really important.
- Scripting mechanics and what performance testing can learn from automated testing
- Heuristics you may be able to use to plan, execute, and interpret performance tests rapidly
- Common characteristics of effective performance testers

Eric Proegler has been testing Windows applications for 15 years and performance testing them for 9. He is responsible for performance testing and analysis of new releases of .WPF and browser-based IIS.NET clients for a high-concurrency and high-transactional database application. Eric also writes, teaches, and consults in areas of performance testing, SQL Server, hardware selection and sizing, WAN deployment, storage, and solution design for customers and partners of Hyland Software, the developers of the OnBase ECM Solution.

Paul Holland has been performance testing telecommunications equipment since 1995. He is currently the manager of a verification group at Alcatel-Lucent in Ottawa, Canada. He is responsible for testing new releases of DSL switches used by telephone companies to sell triple-play solutions (Video, Voice, and Data). Over the past 15 years Paul has supervised the creation and world-wide deployment of an automation environment; he also created and supervised automation for Asynchronous Transfer Mode (ATM) data switches. Prior to 1995 Paul flew Sea King helicopters for the Canadian Military, and managed to performance test the helicopters in innovative ways.

Visitor Information

Dining

Recommended

Arnie's
3561 28th Street, (616) 956-7901
A local favorite $

Applebee's
4955 28th Street, (616) 977-1977
Bar & Grill $$

Gaia Cafe
209 Diamond SE, (616) 454-6233
Great vegetarian option, includes juice bar $$

Great Lakes Shipping Co.
2455 Burton St. (616) 949-9440
Another local favorite known for steak and seafood $$-$$$

Little Africa
956 E. Fulton St, (616) 222-1169
Enjoy authentic Ethiopian cuisine $$

Mangiamo
1033 Lake Dr. (616) 774-8535
Family style Italian dining with an array of steaks, seafood and casual American fare $$-$$$

Marie Catrib's
1001 Lake Dr SE, (616) 454-4020
Hip dining spot with gourmet food and sandwiches, includes many vegetarian options $

Noodles & Company
2289 E. Beltline Ave. NE (616) 361-2600
Fresh saute and grill; soups, salads $

Olive Garden
3883 28th Street, (616) 940-1632
"When you're here, you're family" Italian cuisine $$

Outback Steakhouse
3650 28th Street, (616) 957-7932
Steak $$

Qdoba Mexican Grill
2887 28th St., (616) 957-9600
Quality, fresh Mexican food $

More Favorites

Papa Vino's
4570 28th Street, (616) 285-5004
Italian Kitchen $-$$

Pietro's Ristorante
2780 Birchcrest (near Breton & 28th St.) (616) 452-3228
Locally owned, Italian cuisine and wood-fired pizzas.

Pietro's "Backdoor pizzeria" offers just as much charm and great food! $$

Rose's
550 Lakeside Drive (616) 458-1122
Once a popcorn store on the shores of Reed's Lake, now a hip dining spot with gourmet food, sandwiches, and outdoor dining- and their signature caramel corn comes with the check! $$

Russ' Restaurant
2750 28th Street, (616) 949-8631
A Grand Rapids' legend, American dining famous for the "Russ' twin-burger." The frugal diner will enjoy the prices and the pie! $

Seoul Garden
3321 28th Street, SE(616) 956-1522
Korean/Chinese cuisine $$

Spinnaker
4747 28th Street, (616) 957-1111
Seafood $$$

T.G.I. Fridays
3345 28th Street, (616) 957-3911
Contemporary American $$

Uccello's
2630 E. Beltline, SE (616) 954-2002

Yen Ching
3015 28th Street, SE (616) 942-9130
Chinese cuisine $$

Provided by: http://www.calvin.edu/resource/dining.htm

Conference Center Map