"Advancing the understanding of the science and practice of software testing according to context-driven principles."

**Association for Software Testing**
**AST**

# CAST 2013
## "Lessons Learned"
### August 26-28, 2013
### Monona Terrace - Madison, WI, USA

**Mobile Schedule**

## Contents

# Welcome

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**CAST 2013**
**"Lessons Learned"**
Association for Software Testing
ast

**August 26-28, 2013**

Monona Terrace
Madison, WI, USA

**Keynotes by:**

**Jon Bach**
**Dawn Haynes**

**Closing by:**

**Scott Barber &**
**Robert Sabourin**

## 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 "Lessons Learned."

**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 has unique tutorials**:
AST has lined up unique interactive tutorials -- led by a recognized thought leader in his or her area 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 is a participatory conference, please participate and enjoy.

# Conference Logistics

## 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*. Except for workshops, 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 or ask a question please hold up the appropriate card as indicated below.

<u>Please ensure that the facilitator has seen your card and acknowledged it before lowering your card:</u>

- **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.

## 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 served doesn't meet your needs, please speak to the food service staff and they will try to accommodate you.

## AST Elections and Annual Meeting

AST is a non-profit professional association dedicated to advancing the understanding of the science and practice of software testing according to context-driven principles.

AST is run by members who volunteer as a nominated, elected slate of officers. AST elections for the Board of Directors will be held during lunch on Tuesday. Non-members and Student members may *not* vote. Only Regular 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

**AssociationForSoftwareTesting.org/about**

The AST Annual Membership Meeting is where election results are announced during lunch on Wednesday.

## WIFI

All visitors have access to the Monona Terrace wireless network with 99.99% reliability. A 128k connection is available free of charge. A 10MB service is also available to CAST attendees, when logging in use the following credentials.

User: CAST

Pass: 2013

Association for
Software
Testing
ast

**AST's Mission and Purpose**

The Association for Software Testing is dedicated to advancing the understanding of the science and practice of software testing according to context-driven principles.

The Association for Software Testing (AST) is a professional non-profit association that is dedicated to advancing software testing and strives to build a testing community that views the role of testing as skilled, relevant, and essential to the production of faster, better, and less expensive software products. We value a scientific approach to developing and evaluating techniques, processes, and tools. We believe that a self-aware, self-critical attitude is essential to understanding and assessing the impact of new ideas on the practice of testing.

**Our Objectives**

Encourage, facilitate, and coordinate partnerships between testing practitioners, testing researchers, non-profits, and business leadership.

Publish content both online and in print containing leading-edge information on testing practice and theory.

Host an annual AST Conference to bring together developers, testers, and researchers in an exchange of testing practices, theories, and techniques.

Support the teaching of software testing by encouraging projects to develop and publish resources that assist classroom presentation, grading, and self-study.

**Who Are We?**

We encourage and promote the use of the principles of context-driven testing to help choose testing objectives, techniques, and deliverables for each specific testing situation recognizing that there are no best practices only good ones in each context.

We are willing to question commonly held beliefs and principles about software development so as to improve the craft of software testing. For example, could it actually be cheaper to fix a bug **later** in the project lifecycle? Can a test be useful and valid without a predetermined result?

**Why Join AST?**

AST was founded with the intention to improve the state of software testing and the lives of testers by raising awareness through events, education, and community. Each member benefits from different aspects of their membership – below are some things you can benefit from as a member.

**Member Benefits Include:**

| | |
|---|---|
| Professional Affiliation | Code of Ethics |
| Industry Activism | Community of Professionals |
| Events | Training (BBST Testing courses) |
| Event and Program Discounts | Blog syndication |



**Learn More about AST:**

http://www.AssociationForSoftwareTesting.org/about

# 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 than 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.

# Training

## 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.

# Training

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 multiple 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

## Test Design

Good testing requires application of many test techniques. Each technique is better at exposing some types of problems and weaker for others. Participants will look at a few techniques more closely than the rest but do not become skilled practitioners of any single technique.

- Gain familiarity with a variety of test techniques
- Learn structures for comparing objectives and strengths of different test techniques
- Use the Heuristic Test Strategy Model for test planning and design
- Use concept mapping tools for test planning

QASymphony is a leading provider of testing solutions that fit the needs of testing organizations at any level of maturity. Whether you are making the initial move from manual processes and simply need defect tracking capabilities or you are a fully agile testing organization, our test management and productivity solutions meet your needs. With offices in Atlanta, GA, Dublin, CA and Ho Chi Minh City, Vietnam, QASymphony is a software company built to revolutionize how software is tested, adopted, and supported. Empowering the QA testing teams for companies such as Silverpop, BetterCloud, Ernst & Young and Compuware, QASymphony is a software-loving team, united by a common belief that software should be better and better tested.

www.qasymphony.com

At Compass our mission is simple: **create technology that helps people be smarter testers**. We are arming modern software QA teams with powerful new tools, enabling better data-driven decisions and faster releases with greater quality and confidence.

As strong believers in Context Driven Testing, we've built Compass Profiler to provide better context for testing decision makers through new types of analytics relating code changes with real-time testing activity. Compass enables the entire QA team (coders and non-coders alike) to optimize a wide variety of functional testing (automated, manual scripts, exploratory, etc.), and to be more agile by aiding communication with all related stakeholders.

www.compassquality.com

# Gold Sponsors



As an independent testing consultant or part of an in-house testing team, ISTQB software testing certification can maximize your options and your potential. Globalization is making the world smaller every day, and you'll be ready, thanks to the only software testing certification that was designed by more than 100 software testing experts from around the planet, and is recognized in nearly 50 countries.

What is the return on investment (ROI) of ISTQB Software Tester Certification? Various studies estimate the cost of a post-production software defect in the range of $4,000 – $5,000. If ISTQB Software Tester Certification can help a software tester to eliminate just one post-production defect in his or her career, the return on investment for an ISTQB exam could be as high as 2000%. With our new Volume Purchase Program, that ROI could be even higher.

Learn more right now about the world's most-used software tester certification by contacting ASTQB, the U.S. board for ISTQB Software Tester Certification, at www.astqb.org or 813.319.0890.

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# Bronze Sponsor
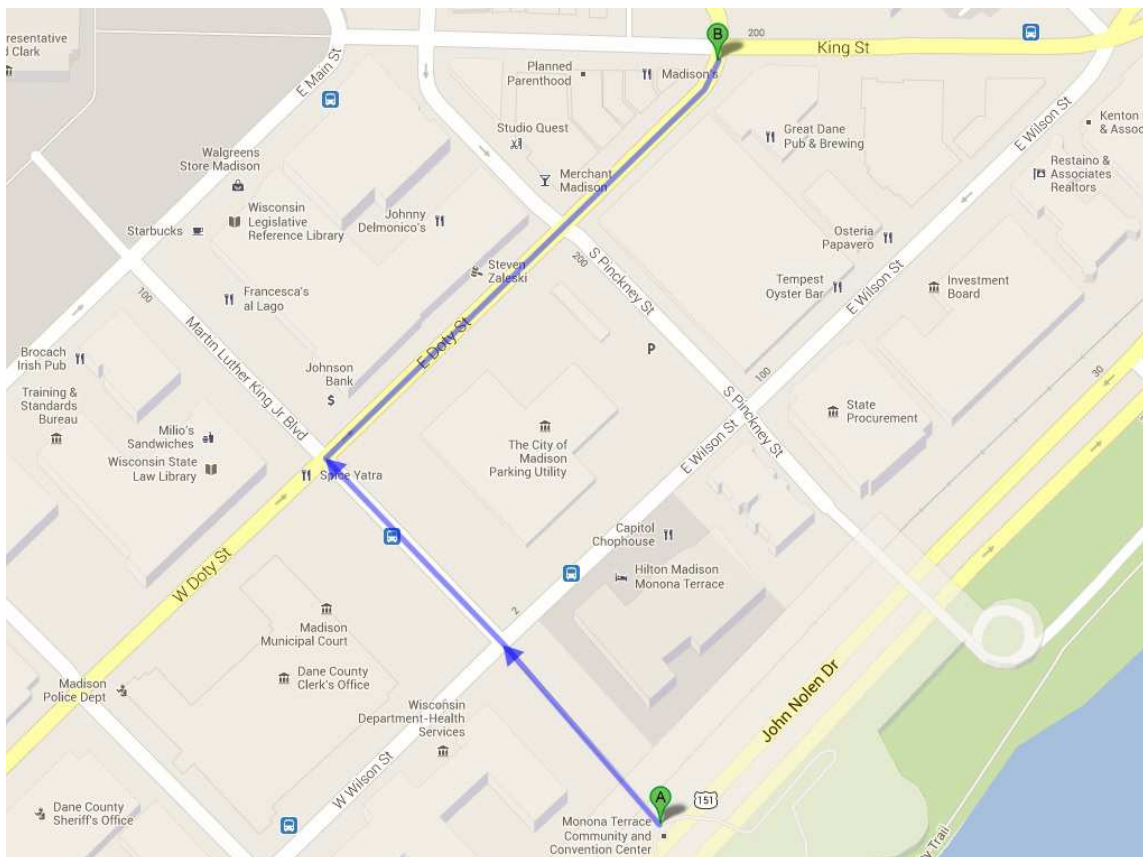
# Maps

## Conference Center



LEVEL 4 - MEETING ROOMS / GRAND TERRACE
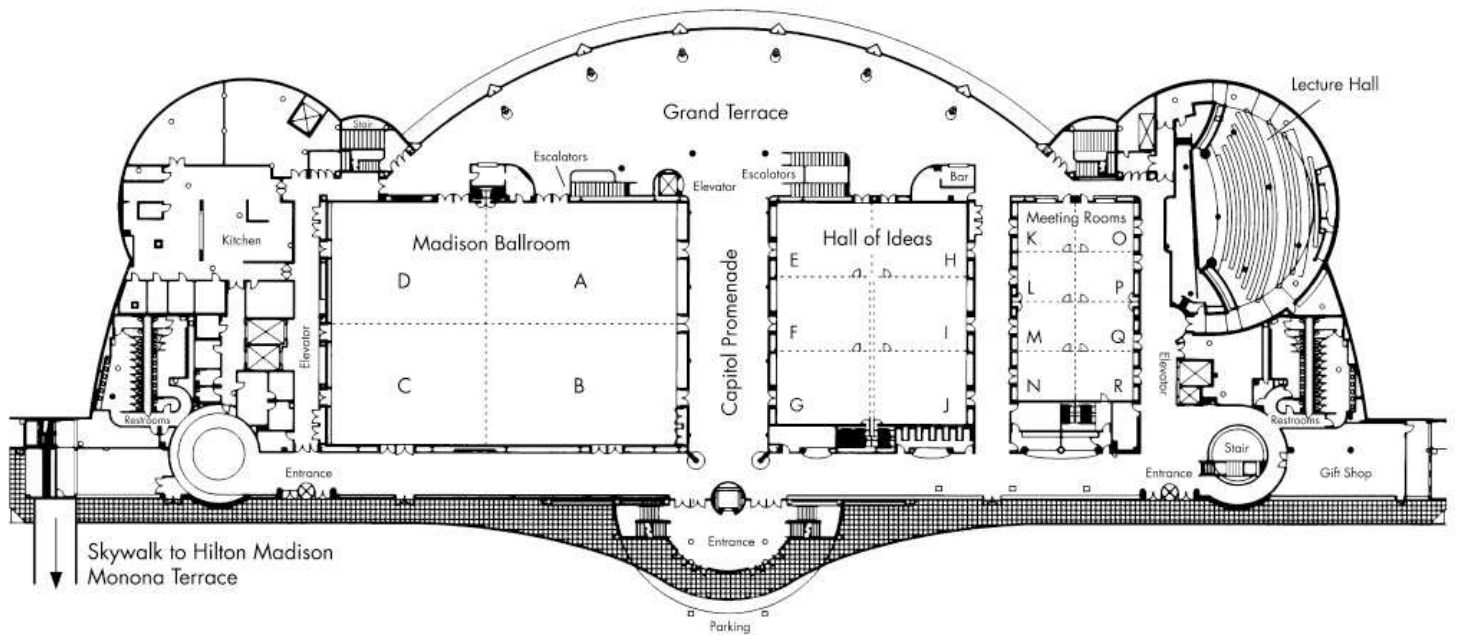
## Great Dane Brew Pub

# Day 1 Schedule

## Tuesday, August 27

| Time | Hall of Ideas E | Hall of Ideas F | Hall of Ideas G | Madison Ballroom AB |
|---|---|---|---|---|
| 8:00a - 9:00a | **Breakfast—Registration Open** [Grand Terrace] | | | |
| 9:00a - 9:25a | **Welcome** [Madison Ballroom AB] | | | |
| 9:25a - 10:45a | **Keynote: Jon Bach** "A House Divided: Lessons Learned from Argument" [Madison Ballroom AB] | | | |
| 10:45a - 11:05a | **Morning Break** [Capital Promenade] | | | |
| 11:05a - 12:20p | **What is software engineering and craftsmanship? And why should I, as a tester, care?** Matt Barcomb & Jim Holmes | **Walking skeletons, Butterflies and Islands—an agile testing journey** Claire Moss | **Exploratory Automated Testing** Doug Hoffman | **Transforming an entire corporate testing organization** Paul Holland & Brian Demers |
| 12:20p - 1:30p | **Lunch (Membership Meeting & Elections)** Heart of Italy Buffet [Grand Terrace] | | | |
| 1:30p - 2:45p | **Building and running a company focused on exploratory and context-driven testing** Pradeep Soundararajan | **Human-Scale Test Automation** Michael Hunter | **How to find good testers in the rust belt** Erik Davis | **Utter failures and lessons remained unlearned** Ilari Henrik Aegerter |
| 3:00p - 4:15p | | | **Exploratory combinatorial testing** Justin Hunter | **Teaching the Next Generation: Developing the SummerQAmp Curriculum** Michael Larsen |
| 4:15p - 4:45p | **Afternoon Break** Milk & Cookies [Capital Promenade] | | | |
| 4:45p - 6:00p | **Making Learning my top priority** Erik Brickarp | **5 Unconventional Traits of extraordinary testers** Heather Tinkham | **Testing under pressure** Geoff Loken | **Tailoring Your Testing Timespan** Geordie Keitt |

## Special Events

| Time | | |
|---|---|---|
| 6:00p - 7:00p | **Evening Reception & Lightning Talks** [Grand Terrace] | **"CAST Live"** [Madison Ballroom AB] |
| 7:00p - 8:00p | | |
| 8:00p - 9:00p | **Experience Report Primer—An ER on ERs** Robert Sabourin [Hall of Ideas E] | **Testing Competition & Testing Games** [Grand Terrace] |
| 9:00p - 10:00p | | |
| 10:00p | **Meet-up** [Great Dane Brew Pub] See page 9 for map | |

**CAST 2013: Lessons Learned**

# Day 2 Schedule

## Wednesday, August 28

| Time | Hall of Ideas E | Hall of Ideas F | Hall of Ideas G | Madison Ballroom AB |
|---|---|---|---|---|
| 8:00a - 9:00a | **Breakfast** [Grand Terrace] | | | |
| 9:00a - 9:25a | **Welcome** [Madison Ballroom AB] | | | |
| 9:25a - 10:45a | **Keynote: Dawn Haynes** "Introspective Retrospectives: Lessons Learned and Re-Learned" [Madison Ballroom AB] | | | |
| 10:45a - 11:05a | **Morning Break** [Capital Promenade] | | | |
| 11:05a - 12:20p | **Mind Maps—a practical, lean, visual tool for test planning & reporting** Aaron Hodder | **An ongoing journey of testing mentorship** Rob Bowyer & Sabina Simons | **Elephant Whisperer inspired lessons learned in Software Testing in South Africa** Cindy Carless | **What is good evidence** Griffin Jones |
| 12:20p - 1:30p | **Lunch (Election Results)** Bucky's Tailgate Buffet [Grand Terrace] | | | |
| 1:30p - 2:45p | **Quality Leader: The changing role of a software tester** Anna Royzman | **How do you solve problems?** Carsten Feilberg | **Famous software failures and what we can learn from them** Peter Varhol | **Relationship Woes: Trials of Testers & CEOs** Manuel Mattke & Dee Ann Pizzica |
| 3:00p - 4:15p | | | **Testing when software must work** Barbara Streiffert | **Lessons Learned since the Four Schools** Markus Gärtner |
| 4:15p - 4:45p | **Afternoon Break** Babcock Hall Sundae Bar [Capital Promenade] | | | |
| 4:45p - 5:15p | **Best of the Lightning Talks** [Madison Ballroom AB] | | | |
| 5:15p - 6:15p | **Closing: Scott Barber & Robert Sabourin** "Lessons Learned at CAST" [Madison Ballroom AB] | | | |
| | **Special Events** | | | |
| 6:15p - 7:30p | **"CAST Live"** [Madison Ballroom AB] | | **Testing Games** [Grand Terrace] | |
| 7:00p - 8:00p | **Lessons Learned in Software Test Leadership** Quality Leader SIG Panel Discussion [Hall of Ideas E] | | | |
| 8:00p - 9:00p | **Quality Leader SIG Meeting** [Hall of Ideas E] | **Education SIG Meeting** [Hall of Ideas F] | | |
| 10:00p | **Meet-up** [Great Dane Brew Pub] See page 9 for map | | | |

## "A House Divided: Lessons Learned from Argument"

Can't we all just get along?" is the famous rhetorical question from Rodney King, lightning rod for a series of 1993 riots in Los Angeles. Police officers who'd beaten him with clubs a year earlier during a traffic stop were pronounced Not Guilty, fueling race rage to no one in particular, and L.A. communities were set ablaze by its own citizens.

In software testing, the riots are invisible, but the rage is out there. Maybe you've heard "testing is dead"; "automation will find better bugs"; "don't bother testing, our customers will"; "we're moving to a "Center of Excellence model", or "our certified testers are 'elite'". Maybe your outrage is smoldering, triggered by bad management, bad metrics, unethical practices, and an industry that seems bent on replacing testing skill with the latest open-source automation platform.

If there's anything that's ever been out there that made you want to argue, but held you back, come vent with Jon in this keynote. As the brother to James Bach -- software testing's most prominent lightning rod -- Jon's short answer to the rhetorical "can't we get along?" is "well, no, we can't". There are good reasons for this: debate forms identity; argument fuels scrutiny; and being "contrary" reveals new problems and opportunities. The basis of the CAST conference was to provide a higher degree of scrutiny and debate – to welcome and foster critical thinking and challenges to speaker content.

In this keynote, Jon talks about the power of conflict at work and in the software testing community. If "a house divided against itself cannot stand", then let Jon tell you his opinion on why "good fences make good neighbors.

### Jon Bach

Director of Live Site Quality, eBay

With more than eighteen years of experience in software testing, Jon Bach has held technical and managerial positions in companies including Hewlett-Packard and Microsoft. In his current role as Director of Live Site Quality for eBay, he is dedicated to finding important bugs in eBay's core sites that threaten its core business. He is most notable for creating, with his brother James, Session-Based Test Management, a method to manage and report exploratory testing. He is a founding member of the AST, a former president of CAST (2011) and the AST's first Vice President for Conferences.

## "Introspective Retrospectives: Lessons Learned and Re-Learned"

Using retrospectives and extracting lessons learned are common tools teams use to evaluate a work effort and come up with ideas about what to do again, what to avoid, and what to do differently. This can be a fabulous opportunity to explore processes, team dynamics, organizational influences, external factors, personnel issues, management strategies, guidelines and procedures, tool support, skills, and anything else that contributed to the team's success or failure in achieving their goals. But far too often, lessons learned exercises are forfeited due to lack of time, priority, or interest. Even more tragic is when the time is spent improperly – playing the blame game, venting sessions with no action, gathering data for performance appraisals, etc. – retrospectives can become demoralizing, cause people to participate poorly or even avoid the exercise altogether.

Overall, turning the critical eye toward our own work, analyzing our own failures and shortcomings, can be a difficult task. So I suggest we do it more! Especially if retrospectives and lessons learned sessions are not done or done poorly on your projects. Let's perform personal retrospectives! We can file bugs and perform assessments on ourselves. What we discover can inspire change and personal evolution (and sometimes revolution!) leading to things like establishing favored protocols, reducing unproductive habits, seeing and avoiding traps, finding skill and knowledge gaps, identifying the need for mentorship or opportunities to mentor others, or whatever else you need to become the best master craftsman you can be.

In this session, Dawn will illustrate how she has used introspective retrospectives throughout her career to learn from her experiences – not only to improve personally, but to generate lessons learned to share in coaching and mentoring sessions, conferences presentations, consulting engagements, and training courses. What will you learn, or re-learn?

### Dawn Haynes

Senior Trainer and Consultant, PerfTestPlus

Dawn Haynes is a Senior Trainer and Consultant for PerfTestPlus, and has previously held the position of Secretary and Director for the Association for Software Testing. A highly regarded trainer of software testers, she blends experience and humor to provide testers of all levels with tools and techniques to help them generate new approaches to common and complex software testing problems. In addition to training, Dawn is particularly passionate about improving the state of performance testing across the industry. She has more than 20 years of experience supporting, administering, developing and testing software and hardware systems, from small business operations to large corporate enterprises. Dawn holds a BSBA in MIS with a minor in programming from Northeastern University.

# Closing—Day 2

## "Lessons Learned at CAST"

Rob and Scott will share with you their lessons learned at CAST 2013. This is sure to be an energetic tour de force of this year's conference and you won't want to miss it.

### Scott Barber

Chief Technologist, President and CEO, PerfTestPlus

Scott Barber is viewed by many as the world's most prominent thought-leader in the area of software system performance testing and as a respected leader in the advancement of the understanding and practice of testing software systems in general. Scott earned his reputation by, among other things, contributing to three books (co-author, *Performance Testing Guidance for Web Applications*, Microsoft Press; 2007, contributing author Beautiful Testing, O'Reilly Media; 2009, contributing author How to Reduce the Cost of Testing, Taylor & Francis; TBP Summer, 2011), composing over 100 articles and papers, delivering keynote addresses on five continents, serving the testing community for four years as the Executive Director of the Association for Software Testing, and co-founding the Workshop on Performance and Reliability.

Today, Scott is applying and enhancing his thoughts on delivering world-class system performance in complex business and technical environments with a variety of clients and is actively building the foundation for his next project: driving the integration of testing commercial software systems with the core objectives of the businesses funding that testing.

When he's not "being a geek", as he says, Scott enjoys spending time with his partner Dawn, and his sons Nicholas and Taylor at home in central Florida and in other interesting places that his accumulated frequent flier miles enable them to explore.

### Robert Sabourin

Principle Consultant (and president/janitor), Amibug

Robert Sabourin has more than thirty years of management experience, leading teams of software development professionals. A well-respected member of the software engineering community, Robert has managed, trained, mentored and coached thousands of top professionals in the field. He frequently speaks at conferences and writes on software engineering, SQA, testing, management, and internationalization. The author of I am a Bug!, the popular software testing children's book, Robert is an adjunct professor of Software Engineering at McGill University.  Robert is the principle consultant (&president/janitor) of AmiBug.Com, Inc.

# Special Events

## Tues—8:00p - 10:00p

### Grand Terrace

## Testing Competition

Testers in the competition will receive a brief overview of the product to be tested, will be given a testing mission clarifying what types of issues we value the most, and will have access to a ticketing system, a developer, and a product owner during the scheduled competition times. At the end of the competition, testers will be encouraged to submit a formal summary report of their findings. Prizes will be awarded based on quality of findings, with some special categories for best bug, best report, and others.

We are having all participants register as individuals, however we understand that some teams may form. Just keep in mind that even if you're working as a team for certain aspects of your testing, all final prizes will be awarded to individuals.

## Tues & Wed —7:00p - 10:00p

### Grand Terrace

## Testing Games

Join us for game night. You will have the opportunity socialize with your peers, play testing games to sharpen your skills.

## Tues & Wed —6:00p—7:00p

### Madison Ballroom AB

## "CAST Live"



**"CAST Live"** is a webcast hosted by **Benjamin Yaroch** and **Paul Holland**. The show is streamed live each evening following the close of the conference. Join us!

## Wed— 8:00p—9:00p

### Hall of Ideas E & F

## Special Interest Groups (SIGs)

Special Interest Groups (SIGs) are groups formed by AST members with a desire to pursue significant, long-term activity in an area of interest to the Association. As a member you are invited to join existing SIG or propose a new one. All SIGs are self supporting and AST currently has the following Special Interest Groups (SIGs):

- Education Special Interest Group (EdSIG) - 8:00p—9:00p

- Quality Leader Special Interest Group— 8:00p—9:00p

## What is software engineering and craftsmanship? And why should I, as a tester, care?

This session is will focus on practical tips for keeping automated tests more flexible and maintainable. Attendees will learn key ideas from software engineering and craftsmanship movements (such as abstraction, the Single Responsibility Principle, Don't Repeat Yourself and Clean Code) and then apply them to test design and automation. We'll finish out this session with examples of how testers can further use these concepts to become an effective pair with coders throughout the development lifecycle. You'll leave this session with practical knowledge on applying software craftsmanship principles to test automation--and you'll be a step further to the elusive goal of being a generalizing specialist on a truly cross-functional team.

**Jim Holmes**
Jim Holmes is the Director of Engineering for Test Studio at Telerik. He has over 25 years in the IT field in positions including PC technician, WAN manager, customer relations manager, developer, and yes, tester. Jim has held jobs in the US Air Force, DOD sector, the software consulting domain, and commercial software product sectors. He's been a long-time advocate of test automation and has delivered software on a wide range of platforms. He co-authored the book Windows Developer Power Tools and blogs frequently at http://FrazzledDad.com. Jim is also the President of the Board of Directors for the CodeMash conference held in the middle of winter at an indoor waterpark in Sandusky, Ohio.

**Matt Barcomb**
Matt Barcomb (@mattbarcomb) is passionate about building collaborative, cross-functional teams; enjoys being out-of-doors; loves punning; and thrives on guiding organizations towards sustainable, adaptive and holistic improvement. Matt started programming as a wee lad and eventually wound up getting paid for it. It took him nearly 10 years before he realized that the "people problem" was the biggest issue facing most businesses that use software development. Since then he has spent his time and energy trying to find ways of making the business-software universe a better place to work, play and do business. Matt currently resides in Cleveland and keeps especially busy consulting and hiking. He shares his musings on his blog,http://blog.risingtideharbor.com/

## Walking skeletons, Butterflies and Islands—an agile testing journey

So you think you're an agile tester? So did I! As it turns out, I've experienced different varieties of "agile" development and the shifting definition of testing in those milieux. I went from a separate quality department to being involved in most of the sprint activities as a member of the software product team. Even then, as the team changed and as our situation changed, my testing responded to these changes, becoming a more collaborative experience. We'll talk about the skills to develop to become a Rockstar Tester in the shifting world of agile software development, which takes flexibility, intellect, judgment, skill, and cooperation with the folks on your team.
*And then there are the minor details of your product's context!* If that intrigues you, come hear the story of how I let go of being "the lone tester" and became the testing teacher and coach for my team. Bring your curiosity and some tough questions for me. The don't call it Open Season for nothing!

**Claire Moss**
Claire Moss has always had a passion for writing, which might be a strange trait for a Discrete mathematician, but that doesn't stop her from blogging or writing testing articles. After working briefly as a software programmer during college, Claire signed on as a quality engineer after graduation. By now, Claire has been testing software for 9 years. When you find your calling, you never look back! You might say she's a compulsive empiricist when it comes to software. Claire continues to use her evil powers for good on the job and on her blog. Claire has been known to say: I break software. Other people fix it. Best job in the world. I break it. You buy it. I use my evil powers for good! Test everything; retain what is good. — 1 Thessalonians 5:21 I am a big nerd.

# Day 1 Sessions

## Exploratory Automated Testing

When most people think of automated tests they picture automating what human testers do in running their tests. Sometimes this is what we desire, but it isn't the most powerful way to use test automation. ETA is a testing approach that uses the power of the computer to look for bugs that functional testing misses. Unlike regression tests that do the same thing each time they run, exploratory tests do something different each time. The key to this type of testing is the test oracles – checking for abnormal behavior.

**Doug Hoffman**
I am passionate about software quality. Software testing is fundamental for that quality. Professionally active for an embarrassingly long time. I established Software Quality Methods as a consulting company more than 20 years ago - after many years of experience. Now I teach about testing and do management consulting across a broad range of strategic and tactical areas. (With an emphasis on organizational assessment/improvement, test automation, and test oracles.) I'm on boards of several professional organizations and active in planning software quality conferences. Lots of letters with my name: BACS, MSEE, MBA, ASQ Fellow, ASQ-CSQE, ASQ-CMQ/OE

## Transforming and entire corporate testing organization

The entire approach toward software testing was drastically transformed at a major health insurance company over the past year. In 2010, Brian Demers was hired to guide "transformational change" in the testing department at Premera Blue Cross based near Seattle, WA.
Brian explains the successes and failures that he had over the past three years. He talks about what worked, what didn't work and the steps that eventually brought him to his decision to train his entire test department and their management in a different approach to software testing.
Paul Holland, an independent software consultant and teacher, was brought in to help Brian with the transformation. Paul taught the Rapid Software Testing class to the ~70 testers, four test managers, and the test director. He helps Brian explain this success story from the viewpoint of the facilitator and teacher.
Brian and Paul explain how the test teams were trained, how the teams were involved after the training to get their buy-in to the implementation, what improvements have been seen and how difficulties were overcome.

**Paul Holland**
My name is Paul Holland and I am a consultant and teacher in the profession of software testing. I am a proud and active member of the context-driven school of software testing which means that we believe that you must adapt your approach to any testing mission depending on the situation at hand (or your context). There is no "best way" to use when presented with a given testing problem. You must adjust and adapt to find an approach that will be effective for you. The primary course that I teach is Rapid Software Testing, developed by James Bach and Michael Bolton.

**Brian Demers**
I have been involved in Software Testing for the past 12 years and have worked in a variety of industries and company sizes. I have been in the trenches doing black, white and grey box testing and have fought for test automation and streamlining not only QA but SDLC processes. I have held numerous positions leading small and large teams of testers, developers, PM's and UX and BA roles in both Agile and Waterfall environments.

### Building and running a company focused on exploratory and context-driven testing

In this talk, I will be sharing my personal experience of how I have been building and running my company focused on context driven and exploratory testing successful so far, which is obvious from the title. However, the non obvious things I would be sharing are How money can trouble the vision of being context driven? ( and how I fixed it) [so that future tester entrepreneurs don't need to fall into the same trap]     How we told our customers "We don't do scripted testing"? (and still continue to get business) How I made bold decisions of pulling out of a business when it does not align to context driven testing? (How it meant more business)     How to help customers understand the value we are bringing to them? (and how we need to improve on it)     The challenge of creating context driven testers (and how we are solving it) How I see the context driven testing community is changing? (and not changing, too) What unity can do to this community? (and why we aren't there yet) What is this community doing wrong? (and why I think I need to present at CAST) I don't just have these questions but also answers to it, presented in a form of story mixed with presenting live examples. Here is how I think about it - this presentation is a reflection of what the context driven testing community has done to me and how I am taking the impact to the world.

**Pradeep Soundararajan**
Pradeep Soundararajan has had a great journey so far. Starting his career as a tester, he moved to becoming an independent consultant and then to co-founding Moolya (www.moolya.com) travelling around the world while doing it. His journey wasn't smooth; he also went bankrupt many times but never gave up on the mission to change the world of software testing. He is the KungFu Panda of Moolya where he Heads the Marketing and Sales. He thinks with his Marketing and Sales role, he can bring the right customers to Moolya who also want to change the world of testing. He blogs at http://testertested.blogspot.in and http://moolya.com/blog Never before has a Panda been so feared and so loved. Shashaboyee!

### Human-Scale Test Automation

I've spent the last ten years implementing automation stacks of one form or another. Most of them have been useful. Some have even continued until be useful after I left the team. In helping all these teams converge on a stack that works for them, I've found two constants: every stack is different, and finding the right stack is hard! All those implementation details get in the way, even when we're confident we've abstracted them all away.  In this workshop we'll experience this firsthand: we'll figure out the "right" set of customer actions, implement them in an automation stack where we are the various components, and then execute a few test cases and see what we learn.

**Michael Hunter**
While studying architecture in Chicago, IL, I took an internship updating CAD drawings at a major Chicago bank. My desire to make the computer do most of the work turned that internship into a full-time job writing applications for the CAD system as well as for other areas of the bank. At the same time, a major CAD company was looking for people fluent in both CAD and programming - a perfect fit with my experience. The collaboration proved fruitful for both parties; I found lots of issues with the APIs, and the expertise I developed with those APIs led to my first published articles. My work on AutoCAD brought me a job offer from a competitor and my first full-time testing job. A later acquisition of that company by Microsoft made me a Microsoftie, and I'm somewhat bemused to have now spent thirteen years helping Microsoft test better. My "You Are Not Done Yet" checklist and other good stuff are at http://www.thebraidytester.com.

## How to find good testers in the rust belt

This is an experience report from a test manager discussions the hiring of testers over the past eight years in a tertiary market with details on what has and has not worked for me (so you can get ideas that might work for you). If you don't happen to work in one of the top 10 tech markets and you still need to hire testers, this session is for you.

This session will offer the following key takeaways:

- Why there aren't enough testers out there (who know they are testers).
- The pros and cons of different backgrounds (yes, including CS majors) and why each made good candidates for me.
- Why hiring based on abilities and mindset over credentials and degrees can lead to good candidates in the door, why this likely means "losing" more people to other departments, and why it's OK to stop being so greedy.
- Ways to change your "getting applications in" process or "How to keep HR from throwing out all the good candidates".
- Why you need to get out and hunt down candidates instead of hoping they find you.

**Erik L. Davis**
Erik Davis is a recovering manager of test managers and former CSTE holder working near Cleveland, OH. Recently, he moved from "maintaining headcount", "allocating resources", and "developing metrics" for a testing group of 65 back into testing with a team of 9. This freed him to explore testing as a thinking and learning exercise. Erik can be found on Twitter (@erikld), on his blog (testingthoughts.com/erikdavis/), or participating in a variety of testing events in the Cleveland area.

## Utter failures and lessons remained unlearned

In an ideal world we would happily go along and collect experiences. These experiences would lead to learning and every mistake creates a lesson learned upon which we fine-tune our actions. My experience, however, is that I sometimes utterly fail. There are times where I don't even know what the lesson is I could learn from. The state I am in is one of confusion. Confusion can either be paralyzing or a starting point for a deeper learning experience, which is not a straightforward matter but a complex long-term path. During this session I will explore some of my own failures and identify patterns that lead to them. I also want to include the experiences of the audience and engage in a discussion about failures and what came out of them.

**Ilari Henrik Aegerter**
I lead the Quality Engineering Europe group at the world's biggest online marketplace eBay where I am supported by magnificent test professionals. Quite some time ago I became a software tester by pure chance because I urgently needed a job during my studies in general linguistics. I then so much liked the profession that I continued to intensively work on my skills. Today I am an avid follower of the context-driven school of software testing and I believe that software testing is not a clerical job but a profession that needs a high level of proficiency. In my private time I like to read a lot of books and comics, spend time with my family, test the possibilities of our world with my sons and test good food in restaurants with my wife. I believe that people are generally good and that there is plenty for everybody in this world. All that results in me smiling a lot.

## Exploratory combinatorial testing

The promise of Combinatorial Test Design is that, when used thoughtfully, it often results in:

- Increased variation between tests (which helps find more bugs),
- Decreased repetition between tests (which improves tester productivity)
- Very efficient coverage of user-specified thoroughness goals (which helps testers maximize both their thoroughness and efficiency).

The reality is rarely so straightforward.  Particularly when Exploratory Testers try to apply this test design approach.  In this presentation, Justin Hunter:

- Expands upon concepts that have been laid out by Jon Bach and Rob Sabourin
- Acknowledges "the elephant in the room" (e.g., that practitioners often use Combinatorial Test Design methods to try to create highly-detailed test scripts, which is a repugnant goal for Exploratory Testers)
- Describes practical ways that testers have successfully blended Exploratory Testing strategies and Combinatorial Test design
- Highlights some of the significant challenges that Exploratory Testers face when applying Combinatorial Test design

Key ideas/outcomes you want to share with the attendees:

- Combinatorial test design strategies can be used in many more places than Exploratory Testers probably realize
- These strategies can successfully be applied at the "test charter" level in addition to the test case level
- Combinations can create engagement through priming effects

**Justin Hunter**
Justin Hunter, Founder and CEO of Hexawise, is a test design specialist who grew up in the fine town of Madison, Wisconsin who has enjoyed teaching testers on six continents how to improve the efficiency and effectiveness of their test case selection approaches. The improbably circuitous career path that led him into the software testing field included working as a securities lawyer based in London and launching Asia's first internet-based stock brokerage firm. The Hexawise test design tool is a web-based test design tool at use in more than 100 Fortune 500 firms that is available for free to teams of 5 or fewer testers, as well as to non-profit organizations.

## Teaching the Next Generation: Developing the SummerQAmp Curriculum

Imagine that you have a group of students, between the ages of 16--24. Imagine that these students have traditionally come from backgrounds and environments where technology and science has not been a prominent factor in their lives. Now imagine an initiative aimed at helping those same students being given an opportunity to participate in an internship program where they test software. What would you want to have them learn? How quickly? In what format? What can we do to have these interns be both excited about what they learn, and want to carry that knowledge forward as a career?

Actually, we don't have to imagine. This program exists, and is happening now. The program is called SummerQAmp, and the participants are 16--24 year old students, many from non  technical backgrounds, looking to develop skills towards software testing and quality assurance. AST and the Education Special Interest group took the lead in working with the SummerQAmp program to develop the training materials. We are, right now, actively creating the materials to be used for 2013. Through numerous revisions, a lot of collaboration, and comparing notes with many software testing professionals, we sought to answer one over--arching question..."What did we wish we knew about software testing when we were younger?"

This talk looks to share the decisions we made, the materials we chose to use, the questions we asked and the answers we found, as well as both the positive and negative feedback we received in the process. Our hope is that these materials can be used as a model to help teach the next generation of software testers, and go beyond just the SummerQAmp participants.

**Michael Larsen**
Michael Larsen is a Senior Software Quality Assurance Engineer with Socialtext in Palo Alto.CA. He has been active in software testing for the past two decades, working with companiesranging from networking hardware, virtual machines, capacitance touch devices, video games,legal, entertainment, and social software applications. He is the Chair of the Education SpecialInterest Group for the Association for Software Testing, and has focused on education initiativesand opportunities for software testers. Michael is a founder and facilitator of Weekend Testing inthe Americas. He writes the TESTHEAD blog (http://mkltesthead.com) and can be found onTwitter at @mkltesthead.

**4:45p - 6:00p**

## Making learning my top priority

In this experience report I will talk about how actively trying to prioritize learning helped me overcome the fear of failing, as well as skyrocketed my development as a tester. It's a story that starts with me bailing out from a major test conference, scared of being perceived as a lousy tester, and ends with me being a presenter on a similar conference one year later. I will walk you through my actions and decisions. Actions like setting up a development plan and adding small challenges to all my learning activities. Decisions like not accepting my own excuses. It's been an amazing adventure so far, I hope I can inspire and help you experience it too!

**Erik Brickarp**
Erik Brickarp is a passionate software tester, working for Verisure Innovations AB in Sweden. Two years ago he almost gave up his career in the software testing business but the discovery of context driven testing saved him. Today he's an active blogger and enthusiastic software testing thinker.

# Afternoon Break Sponsors

**Jean Ann Harrison**

Project Realms, Inc.

**Michael Larsen**

TESTHEAD

**Matthew Heusser**

Excelon Development

**Peter Walen**

**Anna Royzman**

AST Quality Leader SIG Chair

**4:45p - 6:00p**

## 5 Unconventional traits of extraordinary testers

There are a lot of ways to get training in testing skills, strategies, and tools, and there are a lot of very capable testers out there. However, there are some testers who stand out from the crowd of even the experienced and trained, regardless of changes in technology or domain. These are professionals who are not only leaders, but also innovators and enablers. They stick in your head as remarkable in their approaches and their accomplishments. What do they do that is so different? If we look at findings from the fields of psychology, organizational behavior, art, and medical innovations, a number of counterintuitive traits turn out to be quite valuable. These characteristics of extraordinary testers are not typically part of the traditional skill sets we talk about, for testers, yet they have been shown to provide great value in these other fields:

- Understanding the value of being wrong
- Daring to disagree
- Being able to "See by forgetting the names of things"
- Benefiting from ignorance
- Building acceptance across users and teams

These are not things that make us comfortable and they are not easy. They are part of what many testers may feel uneasy about despite believing they are vital to our contributions to our projects. We will look at evidence from recent TED talks, artist biographies, and popular science writers that explain how these traits can be used to take your confidence and influence as a tester to new levels, or help you come to terms with the tremendous value you can get from the traits you already have in these directions! **Key ideas:** Understanding the value of these unconventional traits, both for yourself and for other testers, and for building team soft skills How these traits contribute to project success and support critical non-traditional testing influence, particularly in "agile" / "nimble" environments here to find these traits in unexpected people and places.

**Heather Tinkham**
As a passionate, experienced IT business and quality analyst, I have logged over 25 years finding ways to improve projects and to help teams deliver successful systems. I am constantly seeking new insights and practices to better handle the challenges we all face, subjecting them to critical and objective scrutiny before believing the hype. I believe in finding creative ways to move projects forward, while respecting the team I work with and the constraints we face, and have never had a project that I didn't learn things from.

## Testing under Pressure

For most of us, testing shares more in common with emergency response than with airplane maintenance. In a perfect world we'd check the torque on every bolt, and leave the runway with 100% certainty every flight. Most testers don't have that luxury; we're thrown at problems, and have to solve them as quickly as we can, with whatever tools we have. We're expected to quickly understand new contexts, to deal with high pressure, low resources, and rapidly evolving situations. I'll be comparing my experience as a firefighter to my experience with testing. We have to imagine the worst case: we enter a scene with little or no information, an urgency of action, and limited resources. It's imperative to get in and out quickly, to prioritize the critical, high impact response, and to handle whatever unexpected challenges the job is going to throw at you. Every situation is different, and there's never enough information, so how do you prepare for the unknown?

**Geoff Loken**
I'm a Quality Analyst at the Athabasca University. Before this I spent a bit of time doing testing at Bioware, out of Edmonton. We've got a skeleton crew testing department, so I tend to be test lead on my own projects, working with whatever resources I can scrounge up and doing anything I can to get the job done. It's fun and stress inducing. In my copious spare time I train, blog, and attend conferences about QA. I've got an MA in History, so I came into testing through the back door, and spend a lot of surplus energy thinking about advanced education, and how technology is going to affect it.

**4:45p - 6:00p**

## Tailoring Your Testing Timespan

We all want to test with "brain engaged", right?  But what engages your brain? Software testing offers a range of problems and goals of all sizes. Sometimes you can feel like the job is too small and claustrophobic, or else vast and confusing. The right size problem engages your brain at maximum capacity.

The timeframe of the goals you share with your boss, your *timespan of discretion*, determines how you feel. You may need tighter feedback loops and more oversight, or larger goals and more discretion. Your team may need different size goals to suit each individual's capacity. This session will help you discover the timespan of your testing, see if it works for you, and tailor your shared goals to find the right size ones to strive toward. With these ideas you and your team can stay "brain engaged".

**Geordie Keitt**
Geordie Keitt has been testing software full-time since 1995. He apprenticed under James and Jon Bach at Satisfice, Inc. in 2001. He was one of the first testers to implement context-driven testing and session-based test management in the federal government sector (FCC spectrum auctions) in 2003-2004. For several years he has tested Critical Chain project management software for the good folks at ProChain Solutions, Inc.

**8:00p - 9:00p**

## Experience Report Primer—An ER on ERs

Simply put this is an experience report (ER) on experience reports. Rob Sabourin will share an approach used to construct many different types of experience reports. See examples of short five minute lightning talks, framed professional conference experience reports and open ended peer conference experience reports.

Rob will demonstrate by example sharing experience reports about experience reports.

If this is the first conference you've attended that uses the ER method then this primer will help you understand the dynamics of an ER. If you plan to give an ER in the future this session will provide insights into ways you can better share your story and help your audience draw wonderful lessons from your experience.

**Robert Sabourin**
Robert Sabourin has more than thirty years of management experience, leading teams of software development professionals. A well-respected member of the software engineering community, Robert has managed, trained, mentored and coached thousands of top professionals in the field. He frequently speaks at conferences and writes on software engineering, SQA, testing, management, and internationalization. The author of I am a Bug!, the popular software testing children's book, Robert is an adjunct professor of Software Engineering at McGill University. Robert is the principle consultant (&president/janitor) of AmiBug.Com, Inc.

## Mind Maps—A practical, lean, visual tool for test planning & reporting

This session describes how I use mind mapping software as a lean test management tool to model the software, organise and manage the testing activities, and report on the testing story to date. The biggest threats to lean systems testing are the way testing artefacts are traditionally produced and the prevalence of pre-scripted tests. I propose an alternative using James Bach's Heuristic Test Strategy Model as the skeleton for a visual model of the software under test. By using this skeleton to ask questions and as a prompt to learn more about the application, I build a model of the application under test. I will demonstrate how I can use the map as a tool to aid with test estimation, and how it can be used to give testing transcripts context and communicate certain aspects of the testing story visually.

**Aaron Hodder**
I am a context-driven tester from Wellington, New Zealand, and am an advocate for structured exploratory testing techniques such as session-based and thread-based test management. I also love using lean visual methods for organising and reporting on my testing activities. I work at Assurity (http://www.assurity.co.nz), a testing services consultancy as a senior test analyst, and before Assurity, I worked at Metra Weather as a test analyst for the Weatherscape XT product, a weather graphics presentation system used by TV stations worldwide. I firmly believe that the value of any practice depends on its context and the essence of good testing is down to studying the details of the specific project. This includes taking into account the needs of the stakeholders who commissioned the testing, as well as selecting the right testing objectives, techniques and deliverables for that context. I am active in the software testing community, and regularly blog and tweet about testing (http://testerkiwi.blogspot.com/ and more recently at http://hellotestworld.com/). I co-founded WeTest Workshops, a Wellington testing practitioner's meetup group, and I have attended the Kiwi Workshop on Software Testing all years it has been running.

## An Ongoing Journey of Testing Mentorship

Rob Bowyer's experience as a life-long learner and tester suggests that the mentorship relationship is fundamental to the learning journey; whether specifically applied to personal learning, professional development or introspection and personal improvement. As a QA Manager, Rob has found himself in the role of the Mentor as well as Mentee.
Sabina Simons, a young, enthusiastic and intelligent "first-job" tester has proven herself to be Rob's Mentee with "Rock Star" potential.
In this presentation, Rob and Sabina share with you the highlights of their Mentoring story to date.  Hear about Rob's challenges, successes & evolution as a Mentor as well as Sabina's perspective on her testing challenges and what she believes she has learned specifically due to their mentoring model, the value of that learning, the challenges she has faced and how she has evolved as both a tester and as a Mentee.
If you are, or would like to be, a Mentor or a Mentee you will not want to miss this session. Bring your critical thinking caps for the Q & A section to pick their brains, share your similar or dissimilar experiences and/or share your tips related to what they can expect during the next chapter of their Mentorship story.

**Sabina Simons**
I'm an enthusiastic software tester living in Waterloo (ON), Canada and working as a software tester for Desire2Learn Inc. I always look forward to talking about and learning about better ways to test software among other things. I like understanding abstract concepts and applying them in a real-world situation.

**Rob Bowyer**
With a strong foundation in the context driven school, I help people and teams test software in a rapid and cognitive manner.

## 11:05a - 12:20p

### Elephant Whisperer inspired lessons learned in Software Testing in South Africa

A selection of lessons learned in software testing in the Financial Service industry in South Africa is compared to the experiences of a conservationist. The conservationist undertakes the mammoth task of settling a herd of badly behaved, traumatised elephants onto a private game reserve. The size and complexity of a test environment, the execution and reporting techniques used and the development of context driven and exploratory testing principles and philosophies are explored. Cindy Carless uses the deeply moving and entertaining account of settling the elephants while allowing them to remain wild to support her philosophy. She asserts that the real value of software testing is to provide meaningful information to decision makers. This information is used to determine the readiness of the software to add value to the business it is being used to support and enhance.

**Cindy Carless**
Cindy Carless is new to the software testing field and is enjoying being exposed to the new skills and philosophies that so resonate with her. She has experienced a diverse career that started with a BCom qualification that took her into Financial Management. She then moved into soft skills training in honour of her passion for people development and finally into IT via a development house and a configuration and QA manager role. A role in business analysis and project management gave her additional exposure to the software development life cycle and only since 2010 has she been applying herself to formal software testing, which has inspired and revitalised her career.

### What is good evidence

By marshaling credible and persuasive evidence, influential testers answer three basic questions: How good is the product? What testing did you do? Why is the testing any good? Feeble evidence and the behaviors associated with it are common testing maladies and threats to your ability to tell a compelling story. What are the qualities of strong evidence, and the anti-patterns and risks of weak evidence?
Griffin Jones presents the different qualities and types of evidence. We review threats to the credibility and persuasiveness of your work, such as: The danger of false-negative results reported as "pass - as expected", "Lullaby Language" as an anti-pattern of Lean's Genchi Genbutsu (go-and-see), the danger of obsessing on efficiency and how it biases the observer. Finally, we show how over-scripted procedures can superficially conceal fatal evidentiary flaws. Be intentional and critical about the type and quality of your evidence. Leave with the skills to recognize and evaluate the dangers and risks, strengths and weaknesses of the evidence you use for your testing story.

**Griffin Jones**
An agile tester, trainer, and coach, Griffin Jones provides consulting on context-driven software testing and regulatory compliance to companies in regulated and unregulated industries. Recently, he was the director of quality and regulatory compliance at iCardiac Technologies which provides core lab services for the pharmaceutical industry to evaluate the safety of their potential new drugs. Griffin was responsible for all matters relating to quality and FDA regulatory compliance including presenting the verification and validation (testing) results to external regulatory auditors. He is currently a host of the Workshop on Regulated Software Testing (WREST). Reach Griffin at griffin.jones@congruentcompliance.com.

### Quality Leader: The changing role of software tester

4 years ago my company reorganized into product units, and my QA manager position became obsolete. The new reality was not comfortable at first, until, some time and practice later I recognized that my test manager/strategist skills are equally important and applicable to the new role of a tester on the multidisciplinary team. That synthesis emerged into a new role of a "peer leader" which I later identified as a new trend -- through conversations with coaches and thought leaders of our industry. Quality Leader skills are in demand now, and, as I foresee, will be in even higher demand in the future.

I firmly believe that an advancement of the testing profession is calling for leaders, fully versed in testing strategies, equipped with the knowledge of psychology and team dynamics, who know how to utilize all available resources to optimize product delivery. Quality Leaders are motivators and educators who can transform every team member into the quality advocate.

No matter which position you hold now, if you are a member of a team that delivers software products, you will need to advance yourself in order to advance the team to the next level of productivity. To be successful in this endeavor, you have to evaluate your current position and what sets you aside, make an analysis on what the team needs and in what ways you can add most value. We will discuss what's unique about the role that makes it an ideal fit for the context-driven test professional, and what skills are needed to succeed.

**Anna Royzman**
Anna Royzman is the test lead in a cross-functional product development team that delivers game-changing software in the financial industry, where "quality" is as important as the "time to market." With a wealth of experience in the testing and quality assurance field, she has developed unique perspectives on quality leadership during the past decade. Anna organizes discussion panels, leads SIGs, creates workshops, and speaks at conferences to promote the value of skillful testing and the whole team approach to quality. Anna started AST Quality Leader SIG in 2012, and serves as the SIG chair.

### How do you solve problems?

I bet you solve problems well and often. That seems to be something that testers just do. But do you know how you do it ? Do you think others do the same or solve things better than you ? We can only learn this from studying it, and that's exactly what we will do here. I will bring you some testing problems, and we will divide ourselves into groups - some will observe, some will try to solve the problems. Then we will bring it all together to see if we can learn something about how we solve problems, but there just might also be something about which problems we should solve, or even can solve. And then what ? Prepare for some fun. What can you risk to (re-)learn from this: • Learning problems can be frustrating but also fun • We might need some human skills, not just logic • Understanding problems is pretty much the key. Sometimes we cannot see the forest for the trees - and we need to be reminded of that pretty often.

**Carsten Feilberg**
Carsten Feilberg has been testing and managing testing for more than 13 years, working on various projects covering the fields of insurance, pensions, public administration, retail and other back office systems as well as a couple of websites. With more than 19 years as a consultant in IT his experience ranges from one-person do-it-all projects to being delivery and test manager on a 70+ system migration project involving almost 100 persons. He is also a well known blogger and presenter on conferences and a strong advocate for context-driven testing. He is living and working in Denmark as a consultant at the danish branch of swedish based House of Test.

# Day 2 Sessions

## 1:30p - 2:45p

### Famous software failures and what we can learn from them

Death, injury, and physical harm.  Loss of tens or hundreds of millions of dollars.  World-wide and even galaxy-wide embarrassment.  These are just a few of the consequences of some of the more famous software failures over the last couple of decades.  These failures have  received general interest press attention in the past, but have rarely been analyzed to understand how a rigorous testing process could have had an impact on the failure.  Peter examines six publicized software failures, and discusses how effective testing may have brought about a different outcome.  He details the circumstances surrounding these failures, and offers lessons to testers on the importance of certain aspects of testing and evaluating the quality of critical applications.  By studying known failures and their causes, we can add value to our own quality programs to help ensure we don't become a character in a future "famous software failure."

**Peter Varhol**
Peter Varhol is a well-known writer and speaker on software and technology topics, having authored dozens of articles and spoken at a number of industry conferences and webcasts. He has advanced degrees in computer science, applied mathematics, and psychology. His past roles include technology journalist, software product manager, software developer and tester, and university professor.

### Relationship Woes: Trials of Testers & CEOs

The relationship between business leadership (aka upper management) and testing teams is a challenging one. These teams often seem at odds in the struggle to deliver both quality and value.
Dee Ann is a Tester. Manuel is a Business Leader.
In this session we will share stories and discuss the dynamics of this often tumultuous relationship. We believe there are a number of common misconceptions and stereotypes that prevent people in these roles from communicating their needs effectively. But this relationship doesn't have to be so strained.
We will tackle the problems that people in these roles face as they work together. The purpose of this session is to provide ideas for constructive communication, productive deliverables, and an improved understanding of the perspectives of the people in these vibrant and vital roles.

**Dee Ann Pizzica**
Dee Ann Pizzica is a Senior Business Analyst for TerpSys, where she works on custom web applications for a variety of clients. She has been an active member of AST since 2007. Dee Ann was a member of the Board of Directors from 2009 – 2011; including serving as the Treasurer from 2009-2010. She is currently the editor for the AST Community News. She is also a certified Lead Instructor for the Bug Advocacy class in the BBST Course Series.

**Manuel Mattke**
Manuel Mattke leads the product development company Hydra Insight. Hydra works with companies of all sizes on developing product strategies for mobile and web products, and supports the development and launch process end-to-end. Hydra is also developing (and currently beta-testing) an innovation management platform for small and medium-size companies. Manuel founded and sold Apex Digital Systems, a custom software company, co-founded PicPocket Books, a publisher of children's picture books to iPhone and iPad devices, and co-founded the Kingswood Group, a financial services company.

## Testing when software must work

Jet Propulsion Laboratory (JPL) in Pasadena California develops unmanned spacecraft to explore our solar system. Each of the spacecraft is unique and its software is unique. Spacecraft are limited systems with a finite amount of power, fuel, data storage, etc. The various spacecraft have their own flight software that commands it and ground software that evaluates the commands that are sent to the spacecraft to make sure that they do not damage the spacecraft. All of this software is extensively tested because if it doesn't work, the spacecraft could be destroyed. Not only would billions of dollars be lost, but the scientific discoveries that the spacecraft would obtain are lost as well. Software testing is crucial and the lesson learned is "Test as you fly; Fly as you test". What that slogan means varies depending on the type of software involved. This presentation will discuss the various types of software and the types of testing required to be able to assert that the software is tested as you fly and the spacecraft software is flown as you test. In addition, videos of the spacecraft and its mission will be shown to help with understanding the task and to demonstrate how the various types of software are used, and tested as well as the goals/purposes of that software.

**Barbara Streiffert**
Barbara Streiffert is a Senior Systems and Software Engineer at Jet Propulsion Laboratory (JPL) specializing in the development of software approaches for use in ground data systems for spacecraft missions. She has worked in all aspects of systems and software development for commercial, military and aerospace projects. She is currently the Test Engineer for the Multi-Mission Software that supports over 19 applications including spacecraft simulators that are used for verifying, analyzing, translating, packaging, and integrating the commands sent to JPL spacecraft. She has over 20 years of experience in software development and test at JPL.

## Lessons Learned since the Four Schools

It has been 11 years since Lessons Learned in Software Testing has been published, and about the same time since the concept of the four schools in software testing came up. Since then a lot of things happened with the advent of more and more agile methodologies, online courses like the black-box software testing series, and the recent advances in web technology. But what does that tell us about the future in software testing? With the different advances in both technology and business, testers nowadays face many challenges. Some of them hint towards a difficult future in testing, some of them make testing a bright spot in the future to come. After eleven years, it's time to take a look back, and see where we struggle, and where we shine, and how to advance from here.
You will learn about the concept of the four schools in software testing, where the model helped to advance our craft, and where it has not, and possible next steps for the future. You will walk away from this presentation with new things to think about.

**Markus Gärtner**
Markus Gärtner works as a testing programmer, trainer, coach, and consultant with it-agile GmbH, Hamburg, Germany. Markus, author of ATDD by Example - A Practical Guide to Acceptance Test-Driven Development, a student of the work of Jerry Weinberg, founded the German Agile Testing and Exploratory workshop in 2011. He is a black-belt instructor in the Miagi-Do school of Software Testing and contributes to the Softwerkskammer, the Germany Software Craftsmanship movement. Markus regularly presents at Agile and testing conferences all over the globe, as well as dedicating himself to writing about testing, foremost in an Agile context. He maintains a personal blog at http://www.shino.de/blog. He teaches ATDD and context-driven testing to customers in the Agile world. He has taught ATDD to testers with a non-technical background, and he has test-infected programmers in several domains.

**7:00p - 8:00p**

### Quality Leader SIG Panel: Lesson Learned in Software Test Leadership

Whether you are a line manager in test, a head of the test organization or an aspiring test lead, every day you are faced with questions on how to do your job more effectively. We offer you a unique opportunity to learn from your peers who have done that successfully. Join us for the panel discussion where leaders in software testing share their insights, practices, stories of what worked and what failed, and strategies that lead them to their success. The experts will debate and answer your questions on:

Leading an effective test team and test organization
Hiring the right people
Enabling your team for success: building a nourishing environment for learning and growing
Motivating your people
Strategies for managing stakeholders' expectations
Software test leader's skills and qualities
Career advancement in software test leadership

Our panel members collectively possess over 200 years of experience in leading software testers. They are active members of context-driven testing community.

**Facilitator**

**Peter Walen**
Peter Walen has been in software development for over 25 years. After working many years as a programmer, he moved to software testing and QA. After dabbling in Project Management and Business Analysis, he returned to software testing, where he has been working since 1999. He converted to Context Driven testing 2001, rejecting his former heresy and repenting since then. Part of this repentance has been to spread the word of what is Context Driven testing at workshops and conferences. Pete describes himself as a Software Anthropologist and Tester, which encompasses the examination of how software and people relate and react to each other. One area of deep interest and concern for him is how testers learn and are educated. He took the inaugural on-line version of the BBST Instructor's Course and was an Assistant Instructor for the first time this past spring. He is a member of the Education SIG (EdSIG). Pete is an active participant with his local Tester Meetup (Grand Rapids Testers) and an active blogger on software testing.

# "CAST Live"

## California Ballroom

**Follow:** #CAST2013

**Ask a Q:** @AST_News

"CAST Live" is a webcast hosted by **Benjamin Yaroch** and **Paul Holland**. The show is streamed live each evening following the close of the conference.

Each night Ben and Paul will recap that days events, interview influential testers, and discuss all things testing.

Join us live broadcast or watch online.

Youtube Live:
www.associationforsoftwaretesting.org/conference/cast-2013/webcast/

# Pre-Conference Schedule

## Full-Day Tutorials

### Monday, August 26

| 8:00a - 9:00a | Breakfast—Registration Open [Grand Terrace] | | | |
|---|---|---|---|---|
| | Hall of Ideas E | Hall of Ideas F | Hall of Ideas G | Hall of Ideas H |
| 9:00a - 10:30a | Coaching Testers<br><br>Anne-Marie Charrett | End to End agile Testing<br><br>Paul Holland | Software Test Attacks for Mobile & Embedded Devices<br><br>Jon Hagar & Jean Ann Harrison | High Powered Visual Test Design<br><br>Robert Sabourin |
| 10:30a - 10:50a | Morning Break [Capital Promenade] | | | |
| 10:50a - 12:30p | Coaching Testers<br><br>Anne-Marie Charrett | End to End agile Testing<br><br>Paul Holland | Software Test Attacks for Mobile & Embedded Devices<br><br>Jon Hagar & Jean Ann Harrison | High Powered Visual Test Design<br><br>Robert Sabourin |
| 12:30p - 1:30p | Lunch<br>Deli Buffet [Grand Terrace] | | | |
| 1:30p - 3:30p | Coaching Testers<br><br>Anne-Marie Charrett | End to End agile Testing<br><br>Paul Holland | Software Test Attacks for Mobile & Embedded Devices<br><br>Jon Hagar & Jean Ann Harrison | High Powered Visual Test Design<br><br>Robert Sabourin |
| 3:30p - 4:00p | Afternoon Break<br>Cup Cakes [Capital Promenade] | | | |
| 4:00p - 6:00p | Coaching Testers<br><br>Anne-Marie Charrett | End to End agile Testing<br><br>Paul Holland | Software Test Attacks for Mobile & Embedded Devices<br><br>Jon Hagar & Jean Ann Harrison | High Powered Visual Test Design<br><br>Robert Sabourin |

## Coaching Testers

This tutorial teaches you how to coach software testers. In particular, it focuses on coaching testers on skill and developing a questioning mindset.

A lot of tester training focuses on explaining definitions. It explains testing by pointing to a test methodology, or test case template. Experienced testers know though, that there is more to testing than this. Give two testers the same test, one tester will find great bugs while the other struggles to find anything beyond the superficial.
This is because great testing requires great skill. Part of that skill is learning the ability to ask useful questions.
The coaching that I do, focuses on improving skill through questioning and practice to develop a deep understanding of testing and how to perform it.

Specifically coaching can help:
- Sharpen your reasoning
- Explain your actions while testing
- Defend your reasoning
- Understand and deal with ambiguity
- testing concepts

The coaching model that I use is being developed by myself and James Bach. It uses Socratic questioning to probe the students knowledge, challenging them to think deeper and through practice come to a greater understanding of what testing is as well as how to test in a better way.

The intent is for the tester to leave coaching feeling enthusiastic about testing, with the motivation to continue self-learning.
The tutorial will examine the coaching model. In particular we will look at the following:
- Socratic Questioning
- Coaching Task
- Managing a coaching session
- Evaluating Coaching

Testers will have the opportunity to observe, analyze and practice and steer coaching sessions throughout the day.
This workshop is suitable for experienced testers and test managers who want to learn how to coach testers either remotely or in a team environment.

**Anne-Marie Charrett**
Anne-Marie Charrett is a testing coach and trainer with a passion for helping testers discover their testing strengths and become the testers they aspire to be. Anne-Marie offers free IM Coaching to testers and developers on Skype (id charretts) and is is working on a book with James Bach on coaching testers. An electronic engineer by trade, testing discovered Anne-Marie when she started conformance testing to ETSI standards. She was hooked and has been involved in software testing ever since. She runs her own company, Testing Times offering coaching and software testing services with an emphasis on Context Driven Testing. Anne-Marie can be found on twitter at charrett and also blogs at http://mavericktester.com

## End to End agile Testing

*This tutorial offers ideas on how to approach testing a product from beginning to reporting using a flexible methodology.*
You have just been assigned to a new testing project. What do you need to do? How can you organize yourself to develop a plan and start testing? How will you report on your progress?

This tutorial is designed to show you multiple methods of approaching new test projects that should enable you to plan, test and report effectively and efficiently. This approach was developed through much trial and error over a 5 year span as a practical implementation of the Heuristic Software Test Model from Rapid Software Testing concepts. Multiple ideas will be shown and the participants will be able to select the methods that can be directly applied or adapted to their own environments.

You will be instructed during hands-on testing of a product from the software being handed to you through to your final report. You will start by creating three raw lists (Product Coverage Outline, Potential Risks, and Test Ideas) that will help ensure high levels of product coverage and also assist, later on, in reporting your test activities. These lists will be referenced to create your initial list of test charters. The use of "advanced" test management tools (Microsoft Excel and Whiteboards with sticky notes) will be discussed and how these can be used to create useful test reports without using "bad metrics" (e.g.: pass/fail counts of test cases, % of test cases executed vs. plan).
You will be able to look forward to your next testing project with these new ideas on how to improve your preparation, your testing, and your test reporting.

**Paul Holland**
My name is Paul Holland and I am a consultant and teacher in the profession of software testing. I am a proud and active member of the context-driven school of software testing which means that we believe that you must adapt your approach to any testing mission depending on the situation at hand (or your context). There is no "best way" to use when presented with a given testing problem. You must adjust and adapt to find an approach that will be effective for you. The primary course that I teach is Rapid Software Testing, developed by James Bach and Michael Bolton.

## Software Test Attacks for Mobile and Embedded Devices

Today's expectations for many software testers include addressing mobile and embedded devices. Unfortunately for many companies, churning out complex or critical mobile and embedded applications while keeping pace with emerging technologies is fast becoming the norm rather than the exception it was just a few years ago. Competitive pressures place a burden on software testing resources to succeed with shortened project schedules, minimal strategic planning and/or staff new to mobile and embedded software.

In the style of James Whittaker's Books on breaking software, Jon Hagar and Jean Ann Harrison will provide specific in depth test attacks aimed at uncovering common mobile-embedded software bugs. The session provides an opportunity to gain a basic introduction to a series of attacks which are based on industry error taxonomy. Exercises to test for bugs within software on real devices will give attendees hands-on testing experience. Attacks are applicable to software systems include: mobile-smart phones, medical systems, automotive devices, avionics systems, and industrial devices.

The tutorial is hands on, so bring your mobile devices (smart phones, tablets or any mobile device). Also, we will provide some devices (robots and games) so attendees can practice some attacks. The goal of the session is to give attendees practical test attacks for use on their future mobile and embedded software projects.

**Jean Ann Harrison**
Jean Ann has been in the Software Testing and Quality Assurance field for over 13 years including 5 years working within a Regulatory Environment. Her niche is system integration testing, specifically on mobile medical devices. Jean Ann has worked in multi-tiered system environments involving client/server, web application, and standalone software applications. Maintaining an active presence in the software testing community, Jean Ann has gained inspiration from many authors and practitioners. She continues to combine her practical experiences with interacting on software quality and testing forums, and attending training classes and conferences.

**Jon Hagar**
Jon Hagar is a systems-software engineer and tester consultant supporting software product integrity, verification, and validation with a specialization in embedded and mobile software. Jon has worked in testing for over thirty years. Embedded projects he has supported include: control systems, spacecraft, mobile-smart devices, IT and smart phones. He teaches classes at the professional and college level. Jon publishes regularly with over 50 presentations/papers, best paper, parts in 3 books, and a book in testing mobile/embedded software (2013). Jon is lead editor/author on ISO 29119 software testing standard and IEEE 1012 V&V plans.

**9:00a - 6:00p**

## High Powered Visual Test Design

Many testing organizations are in a rut. Some testers spend a lot of time completing templates generating repetitive ineffective tests while important bugs slip right by. There is little time available to test increasingly complex solutions being developed. Visual test design techniques enable testers to create powerful test cases with less effort. Visual test design is about focusing on what really matters to customers, developers and all project stakeholders

The test design approaches covered include a blend of classical test design methods using applied discrete math, a smattering of statistics and some experience based software engineering techniques. Core to all of these methods is the creation of visual images used to represent and communicate testing focus.

The course starts with using mind maps to identify test variables, and then moves on to visual models used to isolate critical test values using domain analysis, equivalence partitioning and boundary conditions. Storyboards are used to elicit and design usage scenario based tests. Control flow testing is used to isolate critical pathways to test in project workflows, data flows and even source code. Business rules are tested using simple and complex multiple variable decision tables. Transactional and embedded systems are testing with a blend of state model and state table approaches. Interdependent multiple variable testing is approached from two perspectives using Pareto charts for identifying commonly used transaction pathways and then with pairwise combinations using orthogonal arrays.
Delegates will have a chance to apply many of the methods explored in the class by designing and implementing powerful visual tests for Edgy the Lego® MindStorm robot.

Real world case studies and detailed examples help you get started right away. Rob also shows how some simple tools can help generate powerful visual test designs (blending commercial, free and open source tools).

**Robert Sabourin**
Robert Sabourin has more than thirty years of management experience, leading teams of software development professionals. A well-respected member of the software engineering community, Robert has managed, trained, mentored and coached thousands of top professionals in the field. He frequently speaks at conferences and writes on software engineering, SQA, testing, management, and internationalization. The author of I am a Bug!, the popular software testing children's book, Robert is an adjunct professor of Software Engineering at McGill University. Robert is the principle consultant (&president/janitor) of AmiBug.Com, Inc.

**7:00p-9:00p [Pre-registration Required]**

## Tester Roundtables: Bring Problems, Discover Solutions at CAST

Testers, leads and managers are expected to overcome problems that do not have clear solutions. That's just a part of the job. You are at a conference where your manager sends you and tells you to come back with solutions, or at least ideas, for fixing these problems. Some problems have common solutions and some of the common 'solutions' often fail. If you can bring in an outside perspective, you may be able to see if these solutions can help your specific organization. In this exercise we provide participants with a whole room full of perspective and the tools to work through a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. We then break into small groups and work through a round of problems.

This session does several things. You get the chance to express what the *real* problems you are facing are right now. You meet with others who are also having problems. Then, you discuss possible solutions to these problems – things you did to overcome a problem similar to theirs and, just maybe, talk with people who have dealt with problems similar to yours. Finally, you will meet and confer with people very intensely and possibly build a basis for sharing of ideas, future collaboration and meeting some of the cool people attending CAST this year.

You might not come away with a solution to your specific problem from this workshop. You *will* come away with a tool you can *use at the office* *on Monday* to help organize, frame and direct problem-solving, even when information is limited and the time pressure is strong.

**Peter Walen**
Peter Walen has been in software development for over 25 years. After working many years as a programmer, he moved to software testing and QA. After dabbling in Project Management and Business Analysis, he returned to software testing, where he has been working since 1999. He converted to Context Driven testing 2001, rejecting his former heresy and repenting since then. Part of this repentance has been to spread the word of what is Context Driven testing at workshops and conferences. Pete describes himself as a Software Anthropologist and Tester, which encompasses the examination of how software and people relate and react to each other. One area of deep interest and concern for him is how testers learn and are educated. He took the inaugural on-line version of the BBST Instructor's Course and was an Assistant Instructor for the first time this past spring. He is a member of the Education SIG (EdSIG). Pete is an active participant with his local Tester Meetup (Grand Rapids Testers) and an active blogger on software testing.

**Matthew Heusser**
Matthew Heusser is the principal consultant at Excelon Development, where he acts as a consulting software tester, software process naturalist, writer and recruiter. Matt has been working in software development for his entire professional career, including roles as a developer, project manager, and Test/QA Lead before going independent in May of 2011. In addition to his day job, Matt is a prolific writer. He served as the lead editor for How to Reduce the Cost of Software Testing, wrote the forward for The Clean Coder and contributed a chapter to Beautiful Testing in 2009. A contributing editor at STQA Magazine, Matt writes for other test publications including SearchSoftwareQuality.Com and Informit.com. Also heavily involves in conference activities, Matt is the most proud of his role as a founding organizer of GLSEC (The Great Lakes Software Excellence Conference) and his presentation at Google's Test Automation Conference. And there's video! You can also read Matt's writing at Creatives Chaos, his contributions to the SoftwareTestProfessionals Community Blog, listen to his podcasts with Michael Larsen, read his IT Knowledge Exchange Blog, or follow him on Twitter @mheusser.

# Thank You For Attending!