

Research Triangle Software Symposium

Marriott RTP

August 28 - 30, 2009

<http://www.nofluffjuststuff.com/conference/raleigh/2009/08/home>

Fri, Aug. 28, 2009				
	1	2	3	4
12:00 - 1:00 PM	REGISTRATION			
1:00 - 1:15 PM	WELCOME			
1:15 - 2:45 PM	Emergent Design & Evolutionary Architecture Neal Ford	The Amazing Groovy Weight-loss Plan Scott Davis	The Busy Java Developer's Guide to Java7 Ted Neward	Techniques 2009 Jared Richardson
2:45 - 3:15 PM	BREAK			
3:15 - 4:45 PM	Real-world Refactoring Neal Ford	Groovy XML Ninja Skills Scott Davis	The Busy Java Developer's Guide to Collections Ted Neward	Software Team Tuneup Jared Richardson
4:45 - 5:00 PM	BREAK			
5:00 - 6:30 PM	The Productive Programmer: Mechanics Neal Ford	Groovy Testing Scott Davis	The Busy Java Developer's Guide to ClassLoaders Ted Neward	Agile Anti-Patterns Jared Richardson
6:30 - 7:15 PM	DINNER			
7:15 - 8:00 PM	Keynote: Jared Richardson			

Sat, Aug. 29, 2009				
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8:00 - 9:00 AM	BREAKFAST			
9:00 - 10:30 AM	Architecture and Scaling Ken Sipe	Dim Sum Grails: A Sampler of Practical Non Database-Driven Grails Applications Scott Davis	Effective Java Venkat Subramaniam	Visualizations for Code Metrics Neal Ford
10:30 - 11:00 AM	BREAK			
11:00 - 12:30 PM	So you want to be an Architect Ken Sipe	Web 2.0 Checklist: Deconstructing Modern Websites Scott Davis	Building External DSLs Venkat Subramaniam	IZero: Starting Projects Right Stuart Halloway
12:30 - 1:30 PM	LUNCH			
1:30 - 3:00 PM	What's New in Spring 3 Ken Sipe	The Busy Java Developer's Guide to Java Platform Security Ted Neward	Cleaning up Code Smell Venkat Subramaniam	Taking Agile From Tactics to Strategy Stuart Halloway
3:00 - 3:15 PM	BREAK			
3:15 - 4:45 PM	Java Memory, Performance and the Garbage Collector Ken Sipe	The Busy Java Developer's Guide to Advanced Platform Security Ted Neward	Programming Scala Venkat Subramaniam	Hands-on Agile Development Neal Ford
4:45 - 5:45 PM	BIRDS OF A FEATHER SESSION			

Sun, Aug. 30, 2009				
	1	2	3	4
8:00 - 9:00 AM	BREAKFAST			
9:00 - 10:30 AM	Unit Testing that Sucks Less: Small Things that Make a Big Difference Neal Ford	Open Source Debugging Tools for Java Matthew McCullough	jQuery: Functional, Unobtrusive JavaScript Stuart Halloway	7 Habits of Highly Effective Developers Ken Sipe
10:30 - 11:00 AM	MORNING BREAK			
11:00 - 12:30 PM	Bulletproof Application Development Srivaths Sankaran	Grails for the Enterprise Robert Fischer	Refactoring JavaScript Stuart Halloway	Cloud Computing Boot Camp on the Google App Engine Matthew McCullough
12:30 - 1:15 PM	LUNCH			
1:15 - 2:15 PM	EXPERT PANEL DISCUSSION			
2:15 - 3:45 PM	Test Driven Design Neal Ford	Architecting Code for Concurrent Execution: Theory and Practice Robert Fischer	Java.next #1: Common Ground Stuart Halloway	Mastering Maven 2.0 Matthew McCullough
3:45 - 4:00 PM	BREAK			
4:00 - 5:30 PM	High Performance Projects Srivaths Sankaran	The Concurrency Toolset: JConch, Google Collections, and java.util.concurrent Robert Fischer	Programming Clojure Stuart Halloway	iPhone Objective-C with Java Web Services Matthew McCullough

Research Triangle Software Symposium

-Session Schedule-

(event schedule as of August 25, 2009)

Friday, Aug. 28

12:00 - 1:00 PM : REGISTRATION

1:00 - 1:15 PM : WELCOME

1:15 - 2:45 PM - Sessions

Session #1 : Emergent Design & Evolutionary Architecture by Neal Ford

Most of the software world has realized that BDUF (Big Design Up Front) doesn't work well in software. But lots of developers struggle with this notion when it applies to architecture and design. Surely you can't just start coding, right? You need some level of understanding before you can start work. This session describes the current thinking about emergent design & evolutionary architecture, including both proactive (test-driven development) and reactive (refactoring, composed method) approaches to discovering design. The goal of this talk is to provide nomenclature, strategies, and techniques for allowing design to emerge from projects as they proceed, keeping you code in sync with the problem domain.

Session #2 : The Amazing Groovy Weight-loss Plan by Scott Davis

"The central enemy of reliability is complexity." (Dr. Daniel Geer) Java is a powerful programming language. A smart developer can do nearly anything with Java. So the next question is, "How quickly can it be done? How many lines of code does it take to do common tasks?" Groovy greases the wheels of Java by decreasing the complexity of the language while preserving the raw power. At first glance, you might think that this talk is simply about how Groovy drastically reduces the lines of code you need to write. What this talk is really about is bringing simplicity, clarity, readability, and yes, beauty to your source code.

Session #3 : The Busy Java Developer's Guide to Java7 by Ted Neward

Even though the Java 7 JSR has yet to be formed, some interesting things are beginning to emerge from Sun about what Java7 may include when its formal release contents are finally made public.

Session #4 : Techniques 2009 by Jared Richardson

There are a number of great techniques you can use across technologies and projects. Come hear some of my favorite ways to move "beyond" and contribute a few of your own. We'll discuss topics ranging from glue languages to ditching your IDE to building your brain.

2:45 - 3:15 PM : BREAK

3:15 - 4:45 PM - Sessions

Session #5 : Real-world Refactoring by Neal Ford

Refactoring is a fine academic exercise in the perfect world, but we don't really live there. Even with the best intentions, projects build up technical debt and cruddy bad things. This session covers refactoring in the real world, at both the atomic level (how to refactor towards composed method and the single level of abstraction principle) to larger project strategies for multi-day refactoring efforts. This talk provides practical strategies for real projects to effectively refactor your code.

Session #6 : Groovy XML Ninja Skills by Scott Davis

"XML is like violence: if it doesn't solve your problem, you aren't using enough of it." (Anonymous) XML is everywhere. Whether you are dealing with local configuration files (web.xml, struts-config.xml) or remote web services (SOAP, REST, RSS, Atom), the modern software developer needs to be able to request, slice, and dice XML with ease. That requires a set of razor-sharp tools that reduce the inherent complexity of the problem, not multiply it. Once you see XML tremble in fear at the awesome power of Groovy, you'll wonder what you ever did without it.

Session #7 : The Busy Java Developer's Guide to Collections by Ted Neward

For so many Java developers, the java.util.* package consists of List, ArrayList, and maybe Map and HashMap. But the Collections classes are so much more powerful than many of us are led to believe, and all it requires is a small amount of digging and some simple exploration to begin to "get" the real power of the Collection classes.

Session #8 : Software Team Tuneup by Jared Richardson

We're always under pressure to do more with less. More features with less developers. More product in less time. More work in fewer hours.

4:45 - 5:00 PM : BREAK

5:00 - 6:30 PM - Sessions

Session #9 : The Productive Programmer: Mechanics by Neal Ford

Developers from the 1980s would be shocked at how inefficiently developers use their computers because of the advent of graphical operating systems. This talk describes how to reclaim productivity afforded by intelligent use of command lines and other ways of accelerating your interaction with the computer and bending computers to do your bidding. Stop working so hard for your computer!

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Session #10 : Groovy Testing by Scott Davis

"Tests don't break things; they dispel the illusion that it works." (Anonymous) In this era of "Test-First" and "Test-Driven" development, the modern software engineer knows that testing is no longer an optional part of the process. You need to have the best tools at your fingertips: a set of utilities that maximize your results with a minimum of effort. Groovy offers Java developers an optimal set of testing tools.

Session #11 : The Busy Java Developer's Guide to ClassLoaders by Ted Neward

If you've ever gotten a ClassCastException and just knew the runtime was wrong about it, or found yourself copying .jar files all over your production server just to get your code to run, then you probably find the Java ClassLoader mechanism to be deep, dark, mysterious, and incomprehensible. Take a deep breath, and relax--ClassLoaders aren't as bad as they seem at first, once you understand a few basic rules regarding their operation, and have a bit more tools in your belt to diagnose ClassLoader problems. And once you've got that, and hear about ClassLoaders' ability to run multiple versions of the same code at the same time, and to provide isolation barriers inside your application, or even compile code on the fly from source form, you might just find that you like ClassLoaders after all... maybe.

Session #12 : Agile Anti-Patterns by Jared Richardson

Agile is wildly popular in some circles and hated in others. How can the same ideas cause such different reactions? Sometimes it's the definition of "agile" and other times it's company culture, but there's usually a good reason when Agile ideas are thrown out on their collective ears.

6:30 - 7:15 PM : DINNER

Keynote: \$presentation.title - Jared Richardson

Saturday, Aug. 29

8:00 - 9:00 AM : BREAKFAST

9:00 - 10:30 AM - Sessions

Session #13 : Architecture and Scaling by Ken Sipe

Scale... what is scale... how do you applications that are scalable. How do you know if the application scales?

Session #14 : Dim Sum Grails: A Sampler of Practical Non Database-Driven Grails Applications by Scott Davis

"The proof of the pudding is in the eating. By a small sample we may judge of the whole piece." (Miguel de Cervantes Saavedra) Most Grails tutorials demonstrate how easy it is to build simple CRUD (Create/Retrieve/Update/Delete) applications. While skinning a database with a web front-end is undeniably one beneficial aspect of Grails, it isn't the only thing Grails is good for. As you'll see here, Grails can be used to build a wide variety of web applications. You won't see a single HTML table with "edit" and "delete" links, I promise.

Session #15 : Effective Java by Venkat Subramaniam

Java is a well established language, that has been around for more than a decade. Yet, programming on it has its challenges. There are concepts and features that are tricky. When you run into those, the compiler is not there to help you.

Session #16 : Visualizations for Code Metrics by Neal Ford

Judicious use of metrics improves the quality of your code. But interpreting metrics presents a challenge. You have a list of numbers for a project - what does it mean? And what does it tell me about the health of the project overall? This sessions shows how to produce visualizations for software metrics, making them easier to understand and more valuable. It covers metrics at the individual method level all the way up to the overall architecture of the application. This isn't just a talk about how some tools produce visualizations: this session shows you how to generate your own visualizations, allowing you to customize it to the level in information density that shows real value on your project. I show how to produce projected graphs from dependencies, heat-maps for cyclomatic complexity and code coverage, using XSLT to extract visual information from XML configuration documents, and others. Metrics can't help you if you can't understand them. By creating visualizations, it helps leverage metrics to make your code better.

10:30 - 11:00 AM : BREAK

11:00 - 12:30 PM - Sessions

Session #17 : So you want to be an Architect by Ken Sipe

This session is a quick look at all aspects of being a corporate software architect. Whither you are a developer looking to move into the role of architect, needing to have an understanding of what is expected or already in the role of software architect looking for new and interesting ideas, this session is for you.

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-Session Schedule-

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Session #18 : Web 2.0 Checklist: Deconstructing Modern Websites by Scott Davis

"The challenge of modernity is to live without illusions and without becoming disillusioned." (Antonio Gramsci) There are plenty of sarcastic "Web 2.0" checklists out there -- be perpetually in BETA, when in doubt add rounded corners, etc. While we can all laugh at the superficial aspects of the Web 2.0 revolution, there are plenty of serious aspects to it as well. Is your website mash-up friendly or hostile? Do you tell your visitors when things change (via RSS or Atom syndication), or do you expect them to check in daily for updates? Is your website a silo or a part of a larger ecosystem?

Session #19 : Building External DSLs by Venkat Subramaniam

Domain Specific Languages (DSLs) are languages targeted at a particular problem and domain. They have context and are fluent. They help users of applications at various levels to easily communicate with your application. Developing DSLs, however, are not easy. You could easily get dragged into using parsers and tools with steep learning curve.

Session #20 : IZero: Starting Projects Right by Stuart Halloway

If an iteration is the heartbeat of an agile development process, then Iteration Zero (IZero) creates the heart. While you can (and should) retrospect and adjust throughout the software lifecycle, few things are as valuable as a good start. In this talk, you will learn how we run Iteration Zero at Relevance.

12:30 - 1:30 PM : LUNCH

1:30 - 3:00 PM - Sessions

Session #21 : What's New in Spring 3 by Ken Sipe

The Spring Framework has led the industry in innovation for years. Starting with dependency injection and promoting testing through removal of framework dependencies. Spring 3.0 continues that innovation in a way that takes full advantage of the Java 5 platform. There are a number of significant changes to the framework. So whether you are new to the framework or an experience Spring developer, this is a great session to come up to speed on the latest from SpringSource. **Prerequisite:** Java 5

Session #22 : The Busy Java Developer's Guide to Java Platform Security by Ted Neward

Permissions, policy, SecurityExceptions, oh my! The Java platform is a rich and powerful platform, complete with a rich and powerful security mechanism, but sometimes understanding it and how it works can be daunting and intimidating, and leave developers with the basic impression that it's mysterious and dark and incomprehensible. Nothing could be further from the truth, and in this presentation, we'll take a pragmatic, code-first look at the Java security platform, including Permissions, the SecurityManager and its successor, AccessController, the Policy class and policy file syntax, JAAS, and more.

Session #23 : Cleaning up Code Smell by Venkat Subramaniam

Projects often start out simple, but soon become complex and turn into a lose cannon. Organizations are struggling to maintain and evolve software. Poor code quality is a significant part of that problem. Improving the quality of code is critical to success of enterprise projects.

Session #24 : Taking Agile From Tactics to Strategy by Stuart Halloway

Teams adopting agile should begin at a tactical level, but they shouldn't end there. The Agile Manifesto operates at many different levels. Learn to apply the principles of agile at a strategic level. Otherwise you can have a great agile ground game and still lose.

3:00 - 3:15 PM : BREAK

3:15 - 4:45 PM - Sessions

Session #25 : Java Memory, Performance and the Garbage Collector by Ken Sipe

You are using Java, whew!!! No need to worry about memory, the garbage collector will handle that. Those who have had a memory issue in Java are not so naive any more. Often memory utilization and heap sizes are an after thought and are not recognized until the application is in production, often caused by application uptime, production request volume or production sets of data. When the OutOfMemory Error occurs, often the science of development seems to brake down and knobs are turned. First the (-mx) maximum heap space gets adjusted... More is better right. The next OutOfMemory, heads start scratching, code reviews start in earnest, and Google gets several new hits. Did you know that it is possible to get an OutOfMemory error without running out of heap space?

Session #26 : The Busy Java Developer's Guide to Advanced Platform Security by Ted Neward

So you know the platform security model, and now you want to use it in new and interesting ways, like creating a custom Policy implementation, a custom Permission, or create a custom security context in which code will execute. Perhaps you even wish to make certain objects accessible only to those with the right permissions, or cryptographic key. Nothing could be easier, despite Java security's reputation as a dark and arcane place. **Prerequisite:** *The Busy Java Developer's Guide to Platform Security*

Session #27 : Programming Scala by Venkat Subramaniam

Scala is a static fully object-oriented, functional language on the JVM. While taking advantage of the functional aspects, you can continue to make full use of the powerful JVM and Java libraries.

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Session #28 : Hands-on Agile Development by Neal Ford

BRING YOUR LAPTOP WITH YOU, BUT A LAPTOP ISN'T REQUIRED! Reading and hearing about agile practices is one thing, but actually doing it is completely different. This session puts you to work in an agile fashion, applying agile developer practices.

4:45 - 5:45 PM : BIRDS OF A FEATHER SESSION

Sunday, Aug. 30

8:00 - 9:00 AM : BREAKFAST

9:00 - 10:30 AM - Sessions

Session #29 : Unit Testing that Sucks Less: Small Things that Make a Big Difference by Neal Ford

Unit testing seems to a lot of managers and developers like pure overhead, but professionally responsible developers know that it is one of the keys to quality. This session covers a bunch of small tools that makes testing easier & faster. I talk about tools like Infinittest, Jester, MockRunner, Hamcrest, Groovy, RSpec/EasyB, Selenium, and others. While none of these tools is elaborate enough for it's own session, together they add up to more than the sum of the parts. This session shows tools and strategies to streamline testing, making easier and more palatable for both managers and developers.

Session #30 : Open Source Debugging Tools for Java by Matthew McCullough

This session will survey a wide range of tools across the Java space. We'll look at utilities such as VisualVM, jstatd, jps, jhat, jmap, Eclipse Memory Analyzer, jtracert, btrace and more. Open Source is not just a suite of libraries you consume within your application, but now reaches into the space of tools to help you troubleshoot and improve your applications. The price of these tools eliminates barriers to their use and their open source nature allows you to mix and match them into compositions that work well for your application's unique debugging needs.

Session #31 : jQuery: Functional, Unobtrusive JavaScript by Stuart Halloway

jQuery is a powerful JavaScript library for dealing with HTML, events, animations, and Ajax. Unlike many libraries, jQuery puts the browser object model front-and-center through its ubiquitous wrapped element sets. In this talk, you will learn to progressively enhance your web applications the jQuery way: with unobtrusive, functional JavaScript.

Session #32 : 7 Habits of Highly Effective Developers by Ken Sipe

Thoughts lead to words, words lead to action, actions lead to habits. In this session we'll sharpen the development saw in the process of understanding what makes a hyper-productive programmer. The focus will consist of developer habits and development processes.

10:30 - 11:00 AM : MORNING BREAK

11:00 - 12:30 PM - Sessions

Session #33 : Bulletproof Application Development by Srivaths Sankaran

So, you have written the next kick-ass application. It is "feature complete". You smoke tested it during development. Your project was the poster child for continuous integration. Load testing has certified it for the Christmas rush. However, is it bulletproof? Have you prepared for all eventualities? Is your code rid of all "that can never happen" blocks? Have you validated behavior against all possible scenarios? In this session, we will discuss what it means to bulletproof an application. We will learn ways to develop a solid suite of tests for all layers -- the UI, the business tier and database too. What techniques can you use to help your entire project team? Using appropriate tools and techniques we will make your app not only feature complete but rock solid.

Session #34 : Grails for the Enterprise by Robert Fischer

The Grails web application is an innovative hybrid of best-of-breed Java technologies and dynamic/convention-based development. The result is a powerful, flexible, exciting framework that still fits comfortably into enterprise stacks. This session introduces Grails, but approaches it from the perspective of an enterprise web development stack, in order to see how Grails works well in mid-size and mature development shops.

Session #35 : Refactoring JavaScript by Stuart Halloway

The rise of Ajax and Rich Web Applications, plus the success of dynamic languages, has caused people to revisit the JavaScript language. Now that we take JavaScript seriously as a language, it is time to get serious about the quality of JavaScript code, through refactoring. In this talk, we will test and refactor a real-world jQuery plugin.

Session #36 : Cloud Computing Boot Camp on the Google App Engine by Matthew McCullough

Cloud this, cloud that. It's all we are hearing about these days. And whether buzz-worthy or not, you need to get in-the-know so that you can talk effectively about how this could fit into the application strategy on your next project. Leverage 100s of hours of research distilled into a 90 minute presentation. Get bootstrapped with what cloud computing is and isn't, who the players are in this space, what unique features each offers, and then how Google is completely changing the game.

12:30 - 1:15 PM : LUNCH

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-Session Schedule-

(event schedule as of August 25, 2009)

1:15 - 2:15 PM : EXPERT PANEL DISCUSSION

2:15 - 3:45 PM - Sessions

Session #37 : Test Driven Design by Neal Ford

Most developers think that "TDD" stands for Test-driven Development. But it really should stand for "Test-driven Design". Rigorously using TDD makes your code much better in multiple ways.

Session #38 : Architecting Code for Concurrent Execution: Theory and Practice by Robert Fischer

The power of multicore machines and cloud computing is all dependent on an application's ability to successfully leverage concurrency. Although concurrency has traditionally been considered fatally difficult in Java, a few simple architecture principles can make all the difference. This session will review some of those principles in both theory and practice.

Session #39 : Java.next #1: Common Ground by Stuart Halloway

In this talk, we will explore and compare four of the most interesting new JVM languages: Clojure, Groovy, JRuby, and Scala. Each of these languages aims to greatly simplify writing code for the JVM, and all of them succeed in this mission. However, these languages have very different design goals. We will explore these differences, and help you decide when and where these languages might fit into your development toolkit. For more information see <http://blog.thinkrelevance.com/2008/8/4/java-next-common-ground>.

Session #40 : Mastering Maven 2.0 by Matthew McCullough

Maven has been on the Java build tools scene for quite a number of years, but the adoption rate in enterprises is now going through the roof. Maven can seem daunting, but this presentation will equip existing Maven users with more efficient techniques and tools to overcome the biggest perceived Maven hurdles and build issues with ease. We'll examine tools to help you find artifacts in central repositories, manage your corporation's internal Maven artifacts with a proxy tool such as Nexus, view and override dependency graphs, dependency management and multi-module best practices, create OS specific profiles, and leverage the latest Maven plugins for the top Java IDEs. **Prerequisite:** *Basic Maven knowledge*

3:45 - 4:00 PM : BREAK

4:00 - 5:30 PM - Sessions

Session #41 : High Performance Projects by Srivaths Sankaran

Unsuccessful projects dominate the landscape of IT projects by a wide margin. Retrospectives are common occurrences and the advent of newer project delivery techniques hasn't proven to be the miracle cure. Some projects have lemon written all over them at the time of arrival and others just wither away for want of proper care and feeding. This talk introduces you to a variety of project problems and how to address them. You will learn techniques that will get you off on the right foot and habits that will ensure smooth progress throughout the project's lifecycle. The net result will be a project that hits its target and a customer that is happy.

Session #42 : The Concurrency Toolset: JConch, Google Collections, and java.util.concurrent by Robert Fischer

JConch is a library that provides a few high-level tools for high-concurrency environments on the JVM. The `java.util.concurrent` package in the Java standard library provides low-level structures for managing concurrent communication. Learn here how to use both of them in order to produce clean, highly-concurrent, and highly-tunable code.

Session #43 : Programming Clojure by Stuart Halloway

Find out why Clojure is Java.next: * Clojure provides clean, fast access to all Java libraries. * Clojure provides all the low-ceremony goodness you know and love from dynamic languages such as Ruby and Python. * Clojure includes Lisp's signature feature: Treating code as data through macros. * Clojure's emphasis on immutability and support for software transactional memory make it a viable option for taking advantage of massively parallel hardware.

Session #44 : iPhone Objective-C with Java Web Services by Matthew McCullough

iPhone development is all the rage both in the mobile entertainment, social networking, and productivity application spaces. As a Java developer, prepare yourself to be a participant in aspects of this new breed and platform of development. Hop on board with a quick start to iPhone application coding in Objective-C and integration with some of our favorite Java web service back-ends such as RESTful Grails.