RW DEVCON

The Tutorial Conference

Conference Schedule

February 6-7, 2015
Washington D.C.

Version 1.6

Thanks so much for being a part of RWDevCon!

RWDevCon is organized according to the four main principles behind the conference:

HANDS-ON EXPERIENCE

We believe the best way to learn a subject is through hands-on experience. At RWDevCon, you'll learn by doing!

TEAM COORDINATION

RWDevCon is coordinated as a team—so we can make sure we cover the right topics, and make each tutorial shine!

INSPIRATION

There's more than just tutorials—we also have an entire inspiration track to leave you with new ideas and energy.

FRIENDSHIP

We believe one of the best parts about going to a conference is the people—so get ready to party and play!

You will see these 4 principles reflected in the schedule that follows—we think the combination makes something really special.

The team and I can't wait to meet you in DC!

Ray Wenderlich

BEGINNER TRACK

This track is for those who are beginners to iOS development, or beginners on the listed topic.

We will be sending you some required reading before the conference. If you are a beginner, be sure to do this required reading or some of these talks will go over your head!

INTERMEDIATE TRACK

This track is for Objective-C developers who are not yet fully up-to-speed with Swift.

We have a day-long crash course on Swift tailored toward Objective-C developers, and on the second day get into some fun graphics and gaming topics.

ADVANCED TRACK

This track is for advanced iOS developers who have kept their knowledge up-to-date.

In this track we cover a variety of cool but niche topics - from App Architecture to Advanced Debugging to AsyncDisplayKit and more. You'll definitely learn something new!

INSPIRATION

After a hard day's work at tutorials, you get to sit back, relax, and get some inspiration.

These will be short 18-minute non-technical talks with the goal of giving you a new idea, some battle-won advice, and leaving you excited and energized.

SOCIAL

A big part of RWDevCon is a spirit of cooperation and friendship.

You're all invited to an opening reception on Thursday to get to know each other, a board game tournament, and a big party Friday night. Let's get this party started!

SCHEDULE OVERVIEW

THURSDAY FEBRUARY 5

	The Hill
6:00 - 7:00 PM	Opening Reception (Optional)

FRIDAY FEBRUARY 6

	Beginner (The Hill)	Intermediate (The Grid/The Hub)	Advanced (Metropolitan Center)
8:00 - 9:00	Registration		
9:00 - 9:45	Opening Remarks & Keynote		
10:00 - 11:15	101: iOS Apprentice Review 1	201: Swift for Obj-C Devs: Language Basics	301: App Architecture
11:30 - 12:45	102: iOS Apprentice Review 2	202: Swift for Obj-C Devs: Generics, Closures, Enums, and Switch	302: Advanced Debugging
12:45 - 1:45	Lunch	Board Games: Learning	Lunch
1:45 - 3:00	103: Auto Layout	203: Swift for Obj-C Devs: Swift and Cocoa	303: Effortless Responsiveness with AsyncDisplayKit
3:15 - 4:30	104: Adaptive Layout	204: Swift for Obj-C Devs: Functional Programming	304: Unit Testing in Practice
4:45 - 5:15	Possibility	Finishing	Craftsmanship
5:15 - 5:45	Opportunity	Starting Over	Identity I
5:45 - 6:15	Contributing	Commitment	Identity II
6:30 - 9:30	Party!		

SATURDAY FEBRUARY 7
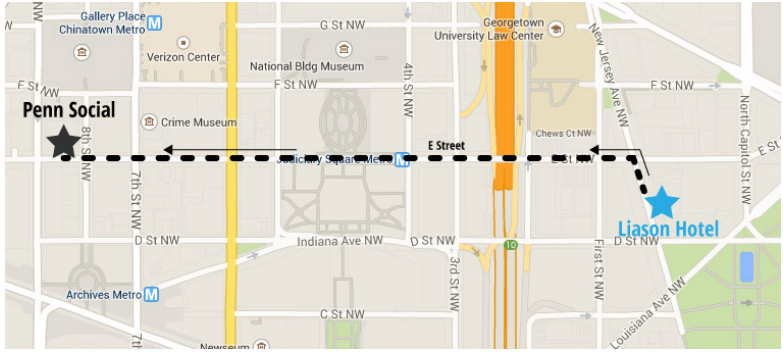
	🚲 **Beginner** (The Hill)	🚗 **Intermediate** (The Grid/The Hub)	🚀 **Advanced** (Metropolitan Center)
9:00 - 10:15	105: App Extensions	205: Beginning Core Graphics	305: iOS Animation: View Controller Transitions
10:30 - 11:45	106: WatchKit	206: Dynamic Custom Controls in Xcode 6	306: iOS Animation: Animating Auto Layout Constraints
11:45 - 12:45	Lunch	Board Games: Tournament	Lunch
12:45 - 2:00	107: WatchKit 2	207: Sprite Kit	307: Core Data & Multithreading
2:15 - 3:30	108: Parse	208: Scene Kit	308: Collection View Custom Layouts
3:45 - 4:15	Business	Devsign	raywenderlich.com Folklore
4:15 - 4:45	Math Isn't Hard	Cognition	NSBrief
4:45 - 5: 15	Closing Remarks		

Room	Feb 6: 10:00 – 11:15	Feb 6: 11:30 – 12:45
Beginner *The Hill*	**101: iOS Apprentice Review 1** **Tammy Coron** *Podcaster, iOS 8 by Tutorials* You read the book. Now it's time to put your knowledge to the test. Wait, you did read the book, right? :] In this session, you'll review the basic concepts of the programming language Swift. You'll learn about objects, protocols, methods, and more. You'll have an opportunity to work with UIKit, Auto Layout, and Size Classes as you build a super secret wicked cool app.	**102: iOS Apprentice Review 2** **Brian Moakley** *Tech Editor* *Prerequisite: 101: iOS Apprentice Review 1* This exciting sequel to the first tutorial features the adventures of an iOS Apprentice who attempts to navigate the dark corridors of Xcode in a quest to make the app of dreams. Thrill as Swift harnesses the power of view controllers, segues, and storyboards that ultimately turns this iOS Apprentice into a full born wizard.
Intermediate *The Grid/Hub*	**201: Swift for Objective-C Devs: Language Basics** **Matt Galloway** *Swift by Tutorials, iOS 7-8 by Tutorials, Effective Objective-C* Swift is the new shiny from Apple. It's the future of iOS programming for sure. You've probably heard about it, maybe even dabbled in it. This tutorial is your opportunity to dive right in and learn about the basics Swift. After this you'll be ready and fired up for the following tutorials which take you further.	**202: Swift for Objective-C Devs: Generics, Closures, Enums, and Switch** **Matthijs Hollemans** *iOS Apprentice, iOS 5-7 by Tutorials, iOS Games by Tutorials* *Prerequisite: 201: Swift for Obj-C Devs: Language Basics* Have you mastered the basics of Swift, but still a little unclear about the more advanced features? Learn to unlock the full expressiveness of Swift with generics, closures, and enums. Generics allow you avoid duplicated code, closures allow a functional programming style, and enums are often a better solution than classes or structs.
Advanced *Metropolitan Center*	**301: App Architecture** **Matthijs Hollemans** *iOS Apprentice, iOS 5-7 by Tutorials, iOS Games by Tutorials* Say no to spaghetti code! Learn how to decide which objects your app needs, how those objects should talk to each other, and how to keep your code from becoming a mess. Clean architecture makes your apps easier to write, understand, and maintain. This talk is for anyone who suspects their code could be better but doesn't know where to start. After this talk, you'll never look at your code the same way again.	**302: Advanced Debugging** **Richard Turton** *Tech Editor* Nobody's perfect. Everybody's apps crash, or do strange and inexplicable things sometimes. In this talk you'll learn how to track down those hard-to-find problems in your code, making clever use of breakpoints and the debugger. Learn battle-tested techniques from a developer who's written hundreds of bugs over the years ;]

Room	Feb 6: 1:45 – 3:00	Feb 6: 3:15 – 4:30
Beginner *The Hill*	### 103: Auto Layout **Greg Heo** *iOS 7 by Tutorials, Tech Editor* If you're tired of manually resizing labels to fit the strings your German translator provided, this session is for you! We'll look at building interfaces with Auto Layout in interface builder, layout margins, and how to work with auto layout constraints in code. These tools will help you design apps to work across different screen sizes, and get you ready for our following talks on Adaptive Layout and Animating Auto Layout Constraints.	### 104: Adaptive Layout **Sam Davies** *iOS 8 by Tutorials* *Prerequisite: 103: Auto Layout* iOS 8 supports five different screen sizes, and as a developer you should support all of these. You have a choice: either create five distinct layouts, or get with the cool kids and learn to love Auto Layout and Adaptive Layout. This tutorial will get you up to speed to Adaptive Layout in IB, and cover some of the underlying concepts including size classes and trait collections.
Intermediate *The Grid/Hub*	### 203: Swift for Objective-C Devs: Swift & Cocoa **Matt Galloway** *Swift by Tutorials, iOS 7-8 by Tutorials, Effective Objective-C* *Prerequisite: 302: Swift for Obj-C Devs: Generics/Closures/Etc.* Developing iOS apps is about much more than the language. Whether you're writing in Swift or Objective-C, you need to know how the system frameworks, Cocoa, are interfaced with. In this tutorial you'll learn how interfacing with Cocoa works in Swift: from the design patterns, to bridging between Swift and Objective-C, and more!	### 204: Swift for Obj-C Devs: Functional Programming **Alexis Gallagher** *Tech Editor* *Prerequisite: 203: Swift for Obj-C Devs: Swift and Cocoa* Swift introduces a load of new language features, but what's the best way to make the most of them? This tutorial provides a pragmatic introduction to functional programming in Swift, comparing an object-oriented approach to a more functional approach. No prior experience required.
Advanced *Metropolitan Center*	### 303: Effortless Responsiveness with AsyncDisplayKit **Scott Goodson** *Facebook Paper* **René Cacheaux** *Tutorial Team Member* AsyncDisplayKit is an iOS framework that helps make even the most complex user interfaces smooth and responsive. It was originally built for Facebook's Paper, and goes hand in hand with Pop's physics-based animations - but it's just as powerful with conventional app designs. Learn how to use AsyncDisplayKit to make silky-smooth UIs - by one of the authors of the framework!	### 304: Unit Testing in Practice **Ellen Shapiro** *Tutorial Team Member* You've written a unit test or two, but are you ready to take your testing to the next level? In this session, you'll learn advanced and practical techniques like testing in-memory stores for Core Data, async testing with XCTestExpectation, using the power of Swift for dead-easy mocking, feeding your networking stack from local files using NSURLProtocol, and more!

INSPIRATION TALKS

Room	Feb 6: 4:45 – 5:15	Feb 6: 5:15 – 5:45
The Hill	**Possibility** **Tammy Coron** *Podcaster, iOS 8 by Tutorials* Impossible: do you keep using that word? If so, as Inigo Montoya would say: we do not think it means what you think it means. Join Tammy Coron as she shows you a whole new approach to the word impossible.	**Opportunity** **Jake Gundersen** *Podcaster, iOS 5-7 by Tutorials, iOS Games by Tutorials* Sometimes we don't recognize opportunities when they're offered to us, and end up missing out. When you reach for opportunities, you'll do more interesting projects, work with people you admire, and experience personal growth that can surprise you. The goal of this talk is to encourage you to take opportunities that stretch you, so you can become a better programmer and professional.
The Grid/ Hub	**Finishing** **Kim Pedersen** *Tutorial Team Member* Starting a project is easy - finishing one is hard. This talk will introduce you to some simple project management tools that might help you overcome some common pitfalls when working on your projects and hopefully get your projects finished and on the App Store.	**Starting Over** **Ellen Shapiro** *Tutorial Team Member* Choosing to change your life or career significantly can be terrifying. Ellen Shapiro has done it twice, and learned a ton. Learn how to determine when it's time to choose a new path, and how to reframe your fears into strengths to build the courage to make a change.
Metropolitan Center	**Craftsmanship** **Chris Wagner** *iOS 7 by Tutorials, iOS 8 by Tutorials* In the world of deadlines and on going pressure we often lose sight of what we set out to achieve. Writing software leaves immense opportunity to sweep things under the rug. It's time to stop cheating ourselves and society. Every one of us is building the future of this world; let's make it great through craftsmanship.	**Identity I** **Vicki Wenderlich** *Artist* We all have a concept of our own identity: as a developer, an artist, etc. But when our internal identity doesn't match our external actions, we feel a lot of stress and negative feelings. In this talk, join Vicki in exploring how these identity conflicts affect our moods, through Vicki's childhood growing up as an identical twin, to an adult with constantly shifting career paths.

Room	Feb 6: 5:45 – 6:15	Feb 6: 6:30 – 9:30
The Hill	### Contributing **Ryan Nystrom** *iOS 8 by Tutorials, Tech Editor* Every single iOS developer has used knowledge, software, and tools contributed by different people. Our community is part of what makes creating software such a wonderful experience and is important to its continuation. In this talk, find out how each and every one of you can give back to the community through open source, spoken or written word, and humility.	### Party at Penn Social! Join us at Penn Social for some fun games, good company, and free food and drinks! It's less than a 15 minute walk down the street. Our drink tab covers about 2 drinks per person, for sodas, beer, house wine, and rail drinks. Drink until our tab runs out! :] (then you can get more but it's on you) Must be 21 or over.
The Grid/ Hub	### Commitment **Brian Moakley** *Tech Editor* Any project worth doing requires focus, vision, and most important of all, commitment. Yet, commitment it a blade that cuts on both sides and in this talk you'll learn that sometimes failure is just as important as success when committing yourself to a vision.

Directions:
- Turn right out of the Liason front door onto New Jersey Ave NW
- Turn left at E Street
- Walk 0.6 miles (about 8 blocks). Penn Social will be on the right!

Penn Social: 801 E St NW
Liason Hotel: 415 New Jersey Avenue NW |
| **Metropolitan Center** | ### Identity II
Alexis Gallagher
Tech Editor

Are you really the developer you want to be? Or an impostor, pretending to be that? Or an impostor pretending not to be that? Has software, perhaps, destroyed you? This talk will tiptoe up to these questions, by reflecting on hero worship, Clojure's model of time, teletransporters, and personal identity in a shifting world. | |

Room	Feb 7: 9:00 – 10:15	Feb 7: 10:30 – 11:45
Beginner *The Hill*	**105: App Extensions** **Chris Wagner** *iOS 7 by Tutorials, iOS 8 by Tutorials* Do you have a great app that you want your users to get access to quicker? Come learn how to make your Today Extensions! These allow your users to access succinct elements of your app right from the lock screen and notification center. You will leave this session with a working widget and the information required to extend your own apps.	**106: WatchKit 1** **Greg Heo** *iOS 7 by Tutorials, Tech Editor* *Prerequisite: 105: App Extensions* Are you ready to buck the trend of larger screen sizes? Get started with developing for Apple Watch and bring the "personal" back to "personal computing" in this session! You'll learn all about the big picture architecture that links your app, iPhone, and Watch together as well as how to lay out your interface and handle user interaction.
Intermediate *The Grid/Hub*	**205: Beginning Core Graphics** **Jake Gundersen** *Podcaster, iOS 5-7 by Tutorials, iOS Games by Tutorials* Core Graphics is the API for drawing in iOS. Forget importing vector PDFs; use the battle tested 2D drawing API to draw custom vector shapes. No more PNG bloat, your entire UI can be drawn using code! In this tutorial, you'll learn the basics of the Core Graphics API and how to use modern tools like PaintCode to assist your journey.	**206: Dynamic Custom Controls in Xcode 6** **Ricardo Rendon Cepeda** *iOS 8 by Tutorials* *Prerequisite: 205: Beginning Core Graphics* New in Xcode 6, it's Live Rendering! In this session, you'll learn how to unleash your UI code and preview custom drawn controls, all without running on your device or simulator. You won't believe your eyes as fonts, shapes, attributes and many more dynamically update without hitting ⌘R.
Advanced *Metropolitan Center*	**305: iOS Animation: View Controller Transitions** **Ryan Nystrom** *iOS 8 by Tutorials, Tech Editor* Are you bored with push and pop navigation? Come learn how to make your app's animations stand out by using the new UIViewController Transitioning APIs. Introduced in iOS 7, these new APIs provide an easy way to build custom animations to navigate between controllers and even make them interactive! You will leave this session knowing how to build custom transitions as well as how to wire them into existing apps.	**306: iOS Animation: Animating Auto Layout Constraints** **Marin Todorov** *iOS 5-7 by Tutorials, iOS Games by Tutorials* *Prerequisite: 103: Auto Layout* Animations are fun! And you probably already know how to create some on iOS. But do you know how to create animations with Auto Layout? Do you know what it takes to move around views that are kept it their place by constraints? In this tutorial you are going to bend Auto Layout to your will and create some delightful UI animations.

Room	Feb 7: 12:45 – 2:00	Feb 7: 2:15 – 3:30
Beginner *The Hill*	### 107: WatchKit 2 **Mic Pringle** *Podcaster, Tech Editor* *Prerequisite: 106: WatchKit 1* If session #1 whets your appetite for WatchKit, you'll love the three-course meal that is WatchKit session #2. You'll start with an entrée of context menus, before being served up a main of Glances mixed with Handoff, then you'll finish up with a fruity watch-to-app-communication-flavoured dessert. Expect to walk away feeling full and satisfied.	### 108: Parse **Fosco Marotto** *Parse + Facebook* Setting up your own servers and databases is a thing of the past! Come find out how to use Parse so you can focus on your app idea, not your infrastructure. We'll build an app together and discuss how to get the most value out of the Parse platform.
Intermediate *The Grid/Hub*	### 207: Sprite Kit **Ray Wenderlich** *Editor-in-Chief* Boom! In this hands-on tutorial, you'll make your own minigame for iOS called Drop Charge, where you have to escape from an alien space ship before it explodes. In the process, you'll learn the basics of Sprite Kit, Apple's 2D game framework. Remember - cool guys don't look at explosions!	### 208: Scene Kit **Kim Pedersen** *Tutorial Team Member* *Prerequisite: 207: Sprite Kit* Lights, camera, action! Have you ever wanted to make a game with 3D content but put off by the steep learning curve? This tutorial will introduce you to SceneKit: a framework for Mac and iOS 8 that allows you to create stunning 3D games with the same ease as you are accustomed to with SpriteKit - without having to learn OpenGL ES.
Advanced *Metropolitan Center*	### 307: Core Data & Multithreading **Saul Mora** *Core Data by Tutorials* Is your app crashing at seemingly random times? Does your threaded Core Data code look like a plate of spaghetti? If yes, then come and learn about multithreaded Core Data, presented by the author of MagicalRecord! You'll be amazed at the simplicity of the 3 simple rules to writing multithreaded apps with Core Data! What are these rules? Come and find out!	### 308: Collection View Custom Layouts **Mic Pringle** *Podcaster, Tech Editor* Tired of the same ol' tabular layout? Then this is the session for you! Come and learn everything you need to know about UICollectionView custom layouts, and finally take control of how your data is displayed. Introduced in iOS 6, but massively under-used, the UICollectionView custom layout APIs open up a whole new world of possibilities when it comes to laying out your data.

INSPIRATION TALKS

Room	Feb 7: 3:45 – 4:15	Feb 7: 4:15 – 4:45
The Hill	**Business** **Cesare Rocchi** *iOS 5, 6, and 8 by Tutorials* Gone are the days in which developing an app and putting it on the store was all we had to do. Nowadays coding is about 10% of the job. In this talk, we'll discuss the remaining 90%.	**Math Isn't Hard** **Matthijs Hollemans** *iOS Apprentice, iOS 5-7 by Tutorials, iOS Games by Tutorials* Even the slightest mention of the word "Mathematics" makes many of us break out in hives. But mathematics is also what makes exciting new technologies possible: big data, machine intelligence, computer vision, robotics. Fortunately, the idea that math is hard and scary is a myth. In this talk, I will try to convince you that if you are able to learn programming, you're also able to learn math — and enjoy it!
The Grid/ Hub	**Devsign** **Ricardo Rendon Cepeda** *iOS 8 by Tutorials* Design and development are inseparable. At their core they both aim to make things work really well. As developers, we should embrace a design-centric mindset and learn how to approach several design stages to make our apps work even better. In this talk, learn the fundamental credo of design as we explore topics such as Product, Interaction, Visual, and UX design.	**Cognition** **Cesare Rocchi** *iOS 5, 6, and 8 by Tutorials* We are all different and we perceive/think in many different ways. And yet there are many universal patterns when it comes to use our cognition. In this talk, learn how to exploit these universal patterns to create well designed applications.
Metropolitan Center	**raywenderlich.com Folklore** **Marin Todorov** *iOS 5-7 by Tutorials, iOS Games by Tutorials* I often get asked at iOS conferences and meetups "What's it like to write for raywenderlich.com?", "Have you ever met Ray - what's he like?", or "How did the team grow over the years?" If you're curious about the answers to these and more - this session is for you! Take a break from the intensive tutorials in the conference, and enjoy some amusing inside stories about the team and Ray himself.	**NSBrief** **Saul Mora** *Core Data by Tutorials* NSBrief has grown over the years to be one of the most well respected iOS & Mac Developer podcasts available on the interwebs. With a wide range of topics and guests, NSBrief has been a project that has opened doors I'd never imagined. Let's take a walk down memory lane, see lessons learned, and also look forward to see what's ahead for one of the older Cocoa podcasts out there.