New Orleans

April 22-26, 2019 | Hyatt Regency New Orleans

Spice Up Your Coding Skills in the Bayou

DEVELOPER TRAINING CONFERENCE HEADS DOWN SOUTH TO NEW ORLEANS

IN-DEPTH TECHNICAL CONTENT ON:

- AI, Data and Machine Learning
- Cloud, Containers and Microservices
- Delivery and Deployment
- Developing New Experiences
- DevOps in the Spotlight
- Full Stack Web Development
- .NET Core and More

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A MESSAGE FROM THE CONFERENCE CO-CHAIRS

AS WE BEGIN 2019, you’ve got to be excited about all the wonderful things happening in the software development world! As .NET developers, we’re riding the wave of .NET Core into a bright future with improved performance and cross-platform capabilities. With Windows Forms and WPF running in .NET Core 3.0, those platforms are revitalized. The front-end Web client space continues to evolve rapidly, with Angular, React, and the amazing potential offered by WebAssembly. Not to be left out, the “server” world is undergoing major renovation with the rapid adoption of container-based technologies like Docker and Kubernetes, alongside the expanding Microsoft Azure platform including serverless Azure Functions.

We’re Andrew Brust, Rockford Lhotka, and Brian Randell, and as Conference Co-Chairs for Visual Studio Live! New Orleans, we’d like to personally invite you to join us this April at the Hyatt Regency in New Orleans, LA. You need to keep up with all the exciting changes in technology. As veterans of the show and longtime speakers, we may be biased, but we firmly believe that an in-person experience, where you get to have two-way conversations about the latest tools and technology, with some of the finest expert speakers in the business—and with the chance to network with your peers—continues to deliver the highest level of value.

Visual Studio Live! in New Orleans gives you more of what you’ve asked for: pre-conference hands-on-labs, keynotes, post-conference workshops and more than 50 conference breakout sessions, covering a wide array of development technologies for everyone. From security to databases to the latest Web and mobile technologies, to Docker & Kubernetes, and DevOps, we’ve got you covered. Our speakers will present on machine learning, bots, and enterprise software solutions in-depth, based on their experience with Windows, macOS, Linux, and mobile platforms.

We have picked every workshop, hands-on lab and session with the goal of transferring knowledge to you, so you can be a better developer and help your organization succeed in this ever-changing world.

You’ll find coverage on .NET Core, C# 8, container technologies and Power BI. If the Web is more your style, you’ll find coverage of TypeScript and Angular on the client as well as ASP.NET Core on the server. Feeling confused about .NET Core? We’ve got sessions to clear it up. Want to improve the quality of your software? We’ve got sessions on unit testing and continuous delivery. Mystified as to how you can bring DevOps to your organization? Our speakers will answer your questions with practical guidance on DevOps for the cloud, the data center and more.

Our hands-on-labs content provides coverage of Cross-Platform Mobile Development with Xamarin and Xamarin.Forms, and Building a Modern DevOps Pipeline on Microsoft Azure. If that’s not what you’re after, we’ve got great workshops on Dependency Injection, SQL Server for Developers, and Cross-Platform C# (including Kubernetes and WebAssembly). Our sessions, hands-on-labs and workshops drill deep into the subjects you need to master and the fundamentals that are always important.

Our industry continues the march toward the future. To keep up, you need to absorb rapidly and adapt. Go beyond Internet-based content to a live experience, where you get to ask questions in real-time and engage directly with the experts and your peers. Find a way to get to Visual Studio Live! New Orleans and get the tools to help yourself grow.

Come celebrate 26 years of great learning and make your own memories with us! We hope to see you there!

VISUAL STUDIO LIVE! CONFERENCE CO-CHAIRS

Andrew Brust
Founder & CEO, Blue Badge Insights

Rockford Lhotka
CTO, Magenic

Brian A. Randell
Partner, MCW Technologies
10.
**ENHANCE YOUR LEARNING WITH HANDS-ON LABS.** Again at VSLive! this year, there's another full day of learning with the Monday Hands-On Labs. Bring your laptop and learn by doing!

9.
**WE’VE NEVER SKIMPED ON CONTENT.** VSLive! is known for being a technically-focused conference, with up to 5 full days of educational sessions on hot topics like ASP.NET Core, Azure, DevOps, SQL Server, Xamarin, AI, JavaScript and more!

8.
**LEARN FOR TODAY. PREPARE FOR TOMORROW.** Get relevant, immediately usable training on what’s happening on the developer landscape now, and learn what’s coming next to get out ahead of the competition.

7.
**NETWORKING IS KEY.** From the networking breakfasts, to evening activities, to just sitting next to someone new at lunch, you’ll have the unique chance to learn from and share with your peers, all week long!

6.
**UNPARALLELED SPEAKER ACCESS.** What has always separated Visual Studio Live! from other conferences (and internet-based training) is the unparalleled access to the speakers. Get your questions answered in-between sessions, during meals and at fun evening events.

5.
**IT’S ALWAYS BEEN ABOUT PERSPECTIVE.** Our speakers include both unbiased industry experts and Microsoft insiders, so you’ll hear every side of the story on the most recent software and industry updates.

4.
**WHAT’S OUR NAME? VISUAL STUDIO LIVE!** Our goal is to help make sense and assist you in harnessing the rapid pace of Microsoft’s updates. Quarterly updates to Visual Studio and Team Foundation Server (TFS) on-premises and Visual Studio Team Services (VSTS) in the cloud continue to deliver value on a regular basis. Visual Studio even provides preview updates monthly.

3.
**WE ARE HEADED TO NEW ORLEANS FOR THE FIRST TIME!** Code by day and enjoy all New Orleans has to offer at our headquarters, Hyatt Regency New Orleans.

2.
**THE CHOICE IS YOURS.** With so many sessions and workshops in a variety of tracks, you’re free to choose what sessions you attend and when. You aren’t bound to any one session or track! Sometimes it’s hard to choose, though, so we provide all conference proceedings and any shared code for all the sessions free to attendees!

1.
**New This Year!**
**ON-DEMAND SESSION RECORDINGS.** Get on-demand access for one full year to all keynotes and sessions from Visual Studio Live! New Orleans, including everything Tuesday-Thursday at the conference.
THE FUN STUFF: VISUAL STUDIO LIVE! NEW ORLEANS EVENTS

YOUR ATTENDANCE AT VISUAL STUDIO LIVE! NEW ORLEANS is about learning from your peers as well as our expert speakers. Make the most of your time and add these events to your itinerary.

DINE-A-ROUND DINNER
Monday, April 22
Join other conference attendees and speakers for a casual, no-host dinner and make a few new friends while enjoying the fun and delicious restaurants in New Orleans. This is your opportunity to meet fellow attendees and start friendships that can last for the week or even longer. Attendees can break into smaller groups based on where everyone wants to dine and head off to dinner. Everyone is responsible for their own drinks and dinner.

WELCOME RECEPTION
Tuesday, April 23
All conference attendees are invited to celebrate the start of Visual Studio Live! New Orleans at the Welcome Reception. Join us in the expo area to network with fellow conference attendees and speakers, talk with the event sponsors, enjoy complimentary drinks and hors d'oeuvres, and participate in the conference raffle.

BIRDS OF A FEATHER LUNCH
Wednesday, April 24
Enjoy lively lunchtime discussions by joining one of our table topic conversations. Tables will have a designated topic to help start discussions and interact with your fellow attendees. You may even learn a new trick or two or some great tips to take back to the office.

VSLIVE!'S SECOND LINE PARADE TO BOURBON STREET
Wednesday, April 24
Join us as we celebrate VSLive! “New Orleans style” with a brass-band parade through the streets to the historic French Quarter. New Orleans is an amazing city, rich in history, culture, a plethora of tastes, sounds and sensations, and we want you to enjoy as much as you can while at VSLive!

To help you experience a bit of New Orleans’ culture, we are hosting a parade to get you the .7 miles from the Hyatt to Bourbon Street. Once the parade safely delivers you to the French Quarter, join friends old and new as you explore the restaurants, bars, jazz clubs, and nightlife on one of the oldest streets in the city.

We will start with a complimentary “go cup” beverage in a souvenir cup at the Hyatt Regency New Orleans. Then, grab some beads and masks and follow the Second Line parade and Grand Marshal as we party through the streets of New Orleans.
### AGENDA AT-A-GLANCE

#### Start Time | End Time
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**Pre-Conference Full Day Hands-On Labs: Monday, April 22, 2019** *(Separate entry fee required)*
7:45 AM | 9:00 AM  
**Pre-Conference Workshop Registration - Coffee and Morning Pastries**
9:00 AM | 1:00 PM  
**HOL01** Full Day Hands-On Lab: Cross-Platform Mobile Development in a Day with Xamarin and Xamarin.Forms  
- Marcel de Vries & Roy Cornelissen

**HOL02** Full Day Hands-On Lab: Building a Modern DevOps Pipeline on Microsoft Azure with ASP.NET Core and Azure DevOps  
- Brian Randell, Mickey Gousset & Aaron Kowall

1:00 PM | 2:00 PM  
Lunch

2:00 PM | 6:00 PM  
**HOL01** Full Day Hands-On Lab Continued

2:00 PM | 6:00 PM  
**HOL02** Full Day Hands-On Lab Continued

6:45 PM | 9:00 PM  
Dine-A-Round - Speakers include Andrew Brust, Roy Cornelissen, Philip Japikse and Ted Neward

#### Start Time | End Time
--- | ---
**Day 1: Tuesday, April 23, 2019**
7:00 AM | 8:00 AM  
Registration - Coffee and Morning Pastries

8:00 AM | 9:15 AM  
**T01** Moving to ASP.NET Core 2.X  
- Philip Japikse

**T02** Building Your First Mobile App with Xamarin Forms  
- Robert Green

**T03** Crack the Code: How Machine Learning Models Work  
- Jen Underwood

**T04** Unit Testing Makes Me Faster: Convincing Your Boss, Your Co-Workers, and Yourself  
- Jeremy Clark

9:30 AM | 10:45 AM  
**T05** Getting Started with ASP.NET Core 2.0 Razor Pages  
- Walt Ritscher

**T06** (WPF + WinForms) * .NET Core = Modern Desktop  
- Oren Novotny

**T07** Containers Demystified  
- Robert Green

**T08** Azure DevOps in the Cloud and in Your Data Center  
- Brian Randell

11:00 AM | 12:00 PM  
**KEYNOTE:** Learn About Mobile DevOps with Xamarin, App Center and Azure DevOps  
- Donovan Brown, Principal DevOps Manager, Cloud Developer Advocacy Team, Microsoft

12:00 PM | 1:30 PM  
Lunch / Visit Exhibitors

1:30 PM | 2:45 PM  
**T09** Diving Deep Into ASP.NET Core 2.x  
- Philip Japikse

**T10** Busy Developer’s Guide to Flutter  
- Ted Neward

**T11** How to Avoid Building Bad Predictive Models  
- Jen Underwood

**T12** Cross-Platform Development with Xamarin, C#, and CSLA .NET  
- Rockford Lhotka

3:00 PM | 4:15 PM  
**T13** Up and Running with Angular in 60 Minutes  
- Justin James

**T14** Programming with PowerApps and Microsoft Flow  
- Walt Ritscher

**T15** Busy .NET Developer’s Guide to Python  
- Ted Neward

**T16** Get Func-y: Understanding Delegates in .NET  
- Jeremy Clark

4:15 PM | 5:30 PM  
Welcome Reception

Sessions and speakers subject to change.
## AGENDA AT-A-GLANCE (continued)

### DevOps in the Spotlight

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<th>START TIME</th>
<th>END TIME</th>
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<tbody>
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</table>

### Cloud, Containers and Microservices

| W01 | Angular Unit Testing from the Trenches - Justin James |
| W02 | Power BI: What Have You Done for Me Lately? - Andrew Brust |
| W03 | Secure Your App with Azure AD B2C - Oren Novotny |
| W04 | Putting the Ops into DevOps - Mickey Gousset |

### AI, Data and Machine Learning

| W05 | TypeScript: Moving Beyond the Basics - Allen Conway |
| W06 | AI and Analytics with Apache Spark on Azure Databricks - Andrew Brust |
| W07 | Architecting and Developing Microservices Apps - Eric D. Boyd |
| W08 | Architecting Systems for DevOps and Continuous Delivery - Marcel de Vries |

### Developing New Experiences

| W09 | Fast Focus: Hybrid Web Frameworks - Allen Conway |
| W10 | Fast Focus: Graph DB from SQL to Cosmos - Leonard Lobel |
| W11 | Fast Focus: What’s New in EF Core 2.x - Jim Wooley |

### Delivery and Deployment

| W12 | Fast Focus: Ultimate Presentation Formula for Nerds - Justin James |
| W13 | Fast Focus: Serverless of Azure 101 - Eric D. Boyd |
| W14 | Fast Focus: Scrum in 20 Minutes - Benjamin Day |

### Full Stack Web Development

| W15 | Introduction to Azure Cosmos DB - Leonard Lobel |
| W16 | Migrating from AngularJS to Angular + TypeScript - Allen Conway |
| W17 | Demystifying Microservice Architecture - Miguel Castro |
| W18 | From One Release per Quarter to 30 Times a Day - Marcel de Vries |

### .NET Core and More

| W19 | Modern SQL Server Security Features for Developers - Leonard Lobel |
| W20 | Getting Pushy with SignalR and Reactive Extensions - Jim Wooley |
| W21 | Make Your App See, Hear and Think with Cognitive Services - Roy Cornelissen |
| W22 | Monitor Your Applications and Infrastructure - Eric D. Boyd |

### Day 2: Wednesday, April 24, 2019

- **Registration - Coffee and Morning Pastries**
- **9:00 AM - 9:15 AM**
- **9:30 AM - 10:45 AM**
- **11:00 AM - 12:00 PM**
- **12:00 PM - 1:00 PM**
- **1:00 PM - 1:30 PM**
- **1:30 PM - 2:20 PM**
- **2:20 PM - 3:45 PM**
- **3:45 PM - 5:15 PM**
- **5:15 PM**

**GENERAL SESSION:** Azure and the Internet of Things—Why Modern Developers Should Care
- *Peter Provost, Principal PM Manager for Azure IoT Central, Microsoft*

**START TIME**
- 7:30 AM
- 8:00 AM
- 9:15 AM
- 9:45 AM
- 10:45 AM
- 11:00 AM
- 12:00 PM
- 1:00 PM
- 1:30 PM
- 1:45 PM
- 2:20 PM
- 3:45 PM
- 4:00 PM
- 5:15 PM
- 6:15 PM

**END TIME**
- 8:00 AM
- 9:15 AM
- 10:45 AM
- 11:00 AM
- 12:00 PM
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- 1:30 PM
- 1:45 PM
- 2:20 PM
- 3:45 PM
- 4:00 PM
- 5:15 PM
- 6:15 PM

Sessions and speakers subject to change.

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“**I THOUGHT ALL OF THE SPEAKERS I HEARD WERE VERY KNOWLEDGEABLE, FRIENDLY AND NOT TRYING TO MARKET THEIR COMPANIES OR SERVICES. THERE WAS NO TECHNOLOGY HARD SELL AND I APPRECIATED THAT.**”

— Karl Wiggins, Randall-Reilly

**Continued next page**
## Day 3: Thursday, April 25, 2019

<table>
<thead>
<tr>
<th>START TIME</th>
<th>END TIME</th>
<th>Session</th>
<th>Description</th>
<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>7:30 AM</td>
<td>8:00 AM</td>
<td></td>
<td>Registration - Coffee and Morning Pastries</td>
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</tr>
<tr>
<td>8:00 AM</td>
<td>9:15 AM</td>
<td>TH01</td>
<td>Advanced Fiddler Techniques</td>
<td>Robert Boedigheimer</td>
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<tr>
<td>9:30 AM</td>
<td>10:45 AM</td>
<td>TH02</td>
<td>Diagnosing and Debugging ASP.NET Core Apps in Production</td>
<td>Paul Yuknewicz &amp; Catherine Wang</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>12:15 PM</td>
<td>TH03</td>
<td>UX Design Fundamentals: What Do Your Users Really See?</td>
<td>Billy Hollis</td>
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<tr>
<td>12:15 PM</td>
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<td></td>
<td>Lunch</td>
<td></td>
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<tr>
<td>1:30 PM</td>
<td>2:45 PM</td>
<td>TH04</td>
<td>Azure DevOps and AKS</td>
<td>Brian Randell</td>
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<tr>
<td>2:45 PM</td>
<td>4:15 PM</td>
<td>TH05</td>
<td>SASS and CSS for Developers</td>
<td>Robert Boedigheimer</td>
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<tr>
<td>3:00 PM</td>
<td>4:15 PM</td>
<td>TH06</td>
<td>The Next Frontier - Conversational Bots</td>
<td>Sam Basu</td>
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<tr>
<td>4:15 PM</td>
<td>5:30 PM</td>
<td>TH07</td>
<td>Porting Your Code from .NET Framework to .NET Standard</td>
<td>Rockford Lhotka</td>
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<td>TH08</td>
<td>Calling All Developers - Get Your Bash On with WSL</td>
<td>Brian Randell</td>
</tr>
<tr>
<td>7:30 AM</td>
<td>8:00 AM</td>
<td>TH09</td>
<td>Upload and Store a File Using MVC</td>
<td>Paul Sheriff</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>9:15 AM</td>
<td>TH10</td>
<td>Essential Tools for Xamarin Developers!</td>
<td>Sam Basu</td>
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<tr>
<td>9:30 AM</td>
<td>10:45 AM</td>
<td>TH11</td>
<td>What's New in C# 8</td>
<td>Jason Bock</td>
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<tr>
<td>11:00 AM</td>
<td>12:15 PM</td>
<td>TH12</td>
<td>How to Interview a Developer</td>
<td>Billy Hollis</td>
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### Post-Conference Workshops: Friday, April 26, 2019

<table>
<thead>
<tr>
<th>START TIME</th>
<th>END TIME</th>
<th>Workshop</th>
<th>Description</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>7:30 AM</td>
<td>8:00 AM</td>
<td>F01</td>
<td>Workshop: DI for the Dev Guy</td>
<td>Miguel Castro</td>
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<tr>
<td>8:00 AM</td>
<td>12:00 PM</td>
<td>F02</td>
<td>Workshop: SQL Server for Developers: The Grand Expedition</td>
<td>Andrew Brust &amp; Leonard Lobel</td>
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<td>1:00 PM</td>
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<td>F01</td>
<td>Workshop Continued</td>
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<td>F02</td>
<td>Workshop Continued</td>
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<td>F03</td>
<td>Workshop Continued</td>
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Sessions and speakers subject to change.
KEYNOTE / GENERAL SESSIONS

Want a front-row seat to the future of technology? Attend the two general sessions for Visual Studio Live! New Orleans to learn what’s hot on today’s tech landscape and what exciting developments lie ahead for this year and beyond.

Tuesday, April 23, 11:00am – 12:00pm
KEYNOTE:
Learn About Mobile DevOps with Xamarin, App Center and Azure DevOps

Donovan Brown
Principal DevOps Manager, Cloud Developer Advocacy Team, Microsoft

Explore Microsoft’s complete mobile DevOps offering. Learn how to use Xamarin for development, App Center Test Cloud for testing and for beta distribution and analytics and Azure DevOps for CI/CD to automate your solution deployment. During this session, we show you the products that will shape your process and enable your people to continuously deliver value to your end users.

Wednesday, April 24, 11:00am – 12:00pm
GENERAL SESSION:
Azure and the Internet of Things - Why Modern Developers Should Care

Peter Provost
Principal PM Manager, Azure IoT Central, Microsoft

The Internet of Things, often shortened to IoT, is everywhere we look these days. From industry pundits to blogs and even the non-technical mainstream press, IoT is becoming a topic of conversation. From startups to all the major cloud vendors, you’ll find a rich set of services and technologies for IoT. But why should a developer care? More importantly, why should you care? In this hour-long general session, Peter Provost, an industry veteran and developer like you, will share why he thinks you should be considering IoT as part of your solutions. As someone who’s been focused using agile techniques to deliver solutions at scale for Microsoft’s customers, he’ll eliminate the marketing hyperbole and talk about the essentials you should know in order to leverage IoT as a professional, modern developer.

“NETWORKING EVENTS WERE GREAT. SPEAKERS ARE AMAZING! ALL TECH EVENT WITH LOTS OF LIVE DEMOS! KEYNOTES!! & EXCELLENT ORGANIZERS!”
— Ajay Bhosle, Accenture

LEARN MORE:
vslive.com/neworleans
HANDS-ON LABS

Visual Studio Live! New Orleans offers two instructor-led, pre-conference Hands-On Labs to help you take your dev skills to a new level. Get intensive, in-depth training to complete your conference experience.

Topics covered include:
• ASP.NET Core 2 and Entity Framework Core 2 with Azure DevOps
• Xamarin and Azure

These labs are presented on a Bring Your Own Laptop (BYOL) basis.

Attendance for each Hands-On Lab is limited, so be sure to sign up early!

HOL01 Full Day Hands-On Lab:
Cross-Platform Mobile Development in a Day with Xamarin and Xamarin.Forms
Introductory / Intermediate
MARCEL DE VRIES & ROY CORNELISSEN
Monday, April 22, 9:00am – 6:00pm

.NET has found its way beyond Windows and into a wide range of platforms - not only on the server but also on mobile client operating systems like iOS and Android with the Xamarin framework and tools. Building high-quality apps that span iOS, Android and the Universal Windows Platform (UWP) might seem daunting. In this workshop, Marcel and Roy will get you started on your journey into mobile.

In this full-day Hands-On Lab, you'll go through the process of building one app for multiple mobile platforms. You will learn how to reuse as much code as possible while keeping the native uniqueness of each platform to appeal to your users. We'll start with the characteristics and concepts of each platform because we think building quality apps requires understanding the platforms for which you are building. Next, you'll learn how you can architect your app in a way that maximizes code share among these platforms with design patterns and the Xamarin.Forms framework, which will help you get a much better return on investment than building three separate native apps.

You will learn:
• How to build your first mobile apps on three platforms with the Xamarin framework
• How to maintain platform uniqueness while sharing a large chunk of your code base with Xamarin.Forms
• How to think “mobile first” in your application architecture

HOL02 Full Day Hands-On Lab:
Building a Modern DevOps Pipeline on Microsoft Azure with ASP.NET Core and Azure DevOps
BRIAN RANDELL & MICKEY GOUSSET
Monday, April 22, 9:00am – 6:00pm

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WORKSHOPS

Choose from a range of content and topics by expert presenters with Visual Studio Live! New Orleans’ Pre-Conference workshops.

Topics covered include:
• Cross platform C# with .NET Core, Kubernetes, and WebAssembly
• Dependency Injection Deep Dive
• SQL Server for Developers

F01 Workshop: DI for the Dev Guy
Intermediate
MIGUEL CASTRO
Friday, April 26, 8:00am – 5:00pm

I love opening the eyes of developers to Dependency Injection (DI), both as a pattern and a product. But every time I do a session on it, I run out of time. Something always has to be sacrificed. No more. Time to do an entire workshop on it and cover everything.

I’ll start by demonstrating the problem spaces we’re trying to fix, then I’ll show you how to fix them. I will describe, explain, demonstrate, rinse and repeat all things DI. I’ll go over the pattern and a variety of open-source products out there to implement it. It’s more than just register and resolve. There are a lot of details and choices to make and you’ll learn them here.

After you’ve learned how to fully use a DI container and what it can do for you, I’ll show you how to implement it in a variety of scenarios. Everything from XAML applications to a variety of Web applications to services of different kinds. I’ll cover not only the built-in DI capabilities of ASP.NET Core, but also how to use another DI container with it and how to even incorporate DI in areas in which you may not know was even possible, like controller filter attributes.

We’ll conclude the day with the conversion of an untestable app with no DI in sight to being fully testable and taking complete advantage of dependency injection.

You will learn:
• Problem spaces with both testing and resolving dependencies
• Implementing DI into various app platforms
• Unit testing properly abstracted applications

“EXCELLENT TOPICS, FORMAT AND SPEAKERS.”
— James Grooms, Engineering Software Solutions

LEARN MORE:
vslive.com/neworleans
F02 Workshop: SQL Server for Developers: The Grand Expedition
Intermediate
ANDREW BRUST & LEONARD LOBEL
Friday, April 26, 8:00am – 5:00pm
This all-day workshop on SQL Server will provide coverage of the full range of the platform’s capabilities and optimal usage of them, from core features like security and T-SQL language improvements; to new innovations like running SQL Server in containers and stretching its storage to Azure; to the latest in operational analytics, machine learning (ML) and Big Data. You’ll learn about critical features that have been in the product for some time, as well as many of the latest features, delivered in SQL Server 2019. That’s the tidbit. For details, read on!

We’ll kick things off with the most important features added to the relational engine, including broad multi-platform support across Windows, Linux, and Docker. Then you’ll explore all the latest T-SQL enhancements, including more convenient DDL statements, new string split, join, and aggregate functions, partition truncation, and other language improvements.

Next, we’ll examine the latest security features, including the new strict CLR security model, dynamic data masking (DDM), row level security (RLS), and Always Encrypted. You’ll also get a look at the new “secure enclaves” feature in SQL Server 2019 that enables rich query and range operations on always encrypted data. We’ll also have coverage of Stretch DB, which lets you leverage Azure to archive old data without taking it offline, and we’ll explore temporal tables – versioned tables that enable instant point-in-time queries over your data.

But data platforms aren’t just about operational databases anymore, and neither is SQL Server. So we’ll next move on to its analytics capabilities, starting with columnstore indexes: what they are; how to create them; how they benefit massive data warehouse-style queries; and tips for monitoring how they’re used in query plans.

From there we’ll look at PolyBase, including its connectivity to data lakes on Hadoop clusters and cloud storage as well new connectivity to databases like Oracle, Teradata, MongoDB and even additional SQL Server instances. Next, we’ll look at SQL Server’s Big Data clusters and their incorporation of technologies like Apache Spark, the Hadoop Distributed File System (HDFS) and data stored in the Apache Parquet columnar format.

We’ll start to wind down our analytics tour with a look at SQL Server’s machine learning capabilities, including in-database features made possible by native hosting of the Python and R programming languages. And as the last stop on our analytics tour, we’ll take in how to use Azure Data Studio to query SQL Server and the platforms it integrates with, as well as leverage SQL Server’s data science features.

Our workshop concludes with a look at the latest “beyond relational” capabilities added to the relational database engine. Learn how to exploit the integrated JSON support – whether you are projecting or consuming JSON content, or you are implementing a hybrid relational/JSON solution. Then we’ll wrap up with the latest Graph DB support, where (ironically) this capability delivers a superior relationship-focused data model compared to traditional relational tables.

Attend this workshop, designed especially for developers, and get up-to-speed on both the latest relevant SQL Server features and the product’s classic critical capabilities!

You will learn:
• How to accelerate your database development process by running cross-platform SQL Server inside Docker containers
• The latest T-SQL language enhancements, plus DDM, RLS, Always Encrypted, Stretch DB, temporal tables, JSON, and Graph DB
• How to use SQL Server for data warehouse, big data and machine learning workloads
• The basics of new SQL Server-integrated open source technologies, including Spark, HDFS, Python, R and Parquet

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F03 Workshop: Cross-Platform C# Using .NET Core, Kubernetes, and WebAssembly
Intermediate
JASON BOCK & ROCKFORD LHOTKA
Friday, April 26, 8:00 am– 5:00pm
We have entered an era where Microsoft .NET runs everywhere -- on servers and client devices. Windows, macOS, iPhone/iPad, Android, Linux and other platforms are now supported. Increasingly we’re running server-side code in container-based environments such as Docker and Kubernetes. Perhaps even more exciting is the standards-based WebAssembly (wasm) platform, allowing front-end Web development to be done in languages other than JavaScript, including C, C++, Go, Rust and C#.

Yes, .NET now runs in the browser using native browser capabilities -- no plug-ins are needed. In this workshop Rocky and Jason will show you how to build C# and .NET code that runs on Windows, Linux, Docker/Kubernetes, macOS, iOS, Android and in the browser. You’ll learn how to leverage .NET Core, .NET Standard (netstandard), Visual Studio, Visual Studio Code, Docker, and many other tools and technologies to build apps and services for each platform. Perhaps more important, you’ll learn how to share common code across all these platforms, and techniques for when you need to also leverage platform-specific code.

You will learn:
• How to build C# and .NET code that runs cross-platform on client and server
• How to leverage .NET Standard and .NET Core
• How to share common code across platforms
DEVOPS IN THE SPOTLIGHT

DevOps has been called the second decade of Agile. While it’s easy to get obsessed over tools, it’s really about organizational transformation. It starts with people, better process, and then yes, good products can make all the difference. DevOps is all about continuous value delivery. You have a role to play when it comes to DevOps, and in this track, you’ll learn about the tools, techniques, and concepts that you can immediately apply to your daily work.

You’ll find coverage of:
• Azure DevOps Services in the cloud
• Azure DevOps Server on premises (formally named Team Foundation Server)
• DevOps from the Ops perspective
• Architecting solutions for DevOps and containers
• Application and infrastructure monitoring
• Faster, continuous deployment
• Scrum

T08 Azure DevOps in the Cloud and in Your Data Center
Introductory
BRIAN RANDELL
Tuesday, April 23, 9:30 – 10:45am
Every company is a software company. How you and your team build software, your engineering practices, your toolkit, affects your ability to help your business succeed. In this session, we’ll look at what a modern DevOps pipeline looks like when using Azure DevOps Services or Azure DevOps Server 2019. You’ll hear and see how people, process, and products can come together to deliver better solutions, faster, for any app, using any code, on any platform.

You will learn:
• Why DevOps Matters
• How to Azure DevOps can help you create a CI/CD pipeline
• How you continuously improve your process

W04 Putting the Ops into DevOps
Intermediate
MICKEY GOUSSET
Wednesday, April 24, 8:00 – 9:15am
DevOps is all about teams taking complete ownership of an application from idea to production. Whether you are a developer or an IT Pro, it’s important that you have a grasp of how apps are managed in production and how you can become an active participant in the real time success of your app. In this session, Mickey will cover core monitoring concepts that apply to any type of application. Then he will drill down into some practical examples on how you can use different tools in Azure to make you “Ops Pop”, using three main tools: Application Insights, Log Analytics, and Azure Monitor.

You will learn:
• What you should be monitoring
• How Application Insights can help gather metrics
• How Azure Monitor can be used to monitor your applications and environments

W08 Architecting Systems for DevOps and Continuous Delivery
Intermediate
MARCEL DE VRIES
Wednesday, April 24, 9:30 – 10:45am
“Build it, you run it!” It is a great DevOps tagline. But how can you make this work in practice? In order to “run” the software you need to have insights in how your application is doing in production. You need insights into the performance, usage, infrastructure utilization and new releases that are deployed and their impact.

In this session, Marcel will provide you with practical architectural principles that will help you:
• Separate deployment from release so you can deliver your software any time you want, without downtime
• Get telemetry and insights on product usage, performance and infrastructure utilization

In DevOps you also strive for autonomy. You just don’t want dependencies on other teams. How do you design your system to be independent of other system, while still integrating?

Marcel will talk about how to gather telemetry and performance data, deployment techniques, and development techniques that prevent downtime. After this talk, you will have new insights into how to build a system that you can build and run without losing sleep when you are on pager duty.

You will learn:
• Why we do the things we do
• To rethink current approaches and consider new ways of achieving goals
• Modern deployment techniques
W14  Fast Focus: Scrum in 20 Minutes  
Introductory / Intermediate  
BENJAMIN DAY  
Wednesday, April 24, 2:00 – 2:20pm  
We’ll start off with the fastest Scrum overview of all time and why you should care. From there, we’ll pivot to talk about why Scrum is still relevant in the days of DevOps and continuous deploy and continuous releases. Plus, stick around afterward to chat about your Scrum questions!

W18  From One Release per Quarter to 30 Times a Day  
Intermediate  
MARCEL DE VRIES  
Wednesday, April 24, 2:30 – 3:45pm  
In this session I will take you along a journey where we have an existing legacy application that we will enable to be released multiple times a day. I will teach you how to apply modern release techniques that enable you to move from long and tiresome release cycles to releasing multiple times a day. I will cover the fundamental concepts of DevOps that will enable multiple releases a day. Think of concepts like Feature Toggles, Red/Green Deployments, Telemetry, Cloud technologies, deployment automation, etc. This session will teach you how to release quality software any moment you want.

You will learn:  
• How to rethink your delivery process  
• How to change organizational structure to achieve better performance of your teams  
• New modern release techniques

W22  Monitor Your Applications and Infrastructure  
Introductory / Intermediate  
ERIC D. BOYD  
Wednesday, April 24, 4:00 – 5:15pm  
Your users would love for you to know about and correct issues before they find them. Application Insights enables you to collect usage, error and telemetry data from your applications that can be used to detect and diagnose issues, analyze how your users interact with your applications, determine where to invest development effort, and ultimately enable you to provide your users with a better experience. Azure Monitor Metrics and Logs provides further capabilities to monitor the health of your infrastructure, services and get a single pane-of-glass for monitoring the overall health of your solutions.

Join this session to learn how to get deeper insights into the health and usage of your solutions using Azure Monitor’s Logs, Metrics, Insights (Application Insights, Virtual Machine Insights, etc.), Alerts and Auto-Scale to ultimately provide great user experiences.

You will learn:  
• An overview of Azure Monitor  
• Getting started monitoring your Azure environment  
• How to monitor your application health and usage

TH18  From 2 Years to Continuous Deployment, a Microsoft DevOps Story  
Introductory  
AARON KOWALL  
Thursday, April 25, 3:00pm - 4:15pm  
Learn how Microsoft has taken in its journey to DevOps over the past 8 years and completely changed their approach to building software and services. You’ll learn about Microsoft’s 90,000 engineers working in the public cloud delivering into production multiple times per day and how the same products handle the different cadences of several feature teams while maintaining a single coherent and continuously integrated source of the truth. Aaron explains how the team in Microsoft works and leads a live demo of Microsoft’s internal engineering systems; he’ll also spend significant time talking through the harder cultural change issues that were encountered and discuss how Microsoft has gone about building a new, much more sharing-focused culture inside the company. Join in to discover what Microsoft has learned so far and the next areas it will focus on.
SESSION DESCRIPTIONS BY TRACK (continued)

CLOUD, CONTAINERS, AND MICROSERVICES

Cloud computing is no longer new. For most organizations, it’s not a matter of “if”; it’s more about how much. Container technologies such as Docker and Kubernetes (aka k8s) are having a large impact on cloud computing, as well as on software architecture. This is perhaps most clear when thinking about service-oriented, or microservice, software architectures and how they can be used to leverage cloud- and container-based environments. It is hard to imagine any enterprise development scenario where one or more of these trends would not be high on the list of critical skills.

This track includes coverage of the following:

- Containers 101
- Azure Kubernetes Services
- Azure Active Directory B2C
- Microservice architectures
- Serverless and Azure Functions
- Intelligent apps in the cloud with Azure Cognitive Services

W07 Architecting and Developing Microservices Apps

**Introductory / Intermediate**

**ERIC D. BOYD**

**Wednesday, April 24, 9:30 – 10:45am**

Microservices are the next evolution of application architecture and service design. The design patterns and principles from Service-Oriented Architecture provided good guidance for service design, and now Microservices enhances SOA with architectures and platforms for operationalizing services through development and hosting platforms like Azure Functions and Azure Service Fabric and deployment, orchestration, management and monitoring platforms like Kubernetes, DC/OS and Docker Swarm.

In this session, you will get a lap around Microservices. We will begin with a quick refresh on SOA and the design patterns that guide well-designed SOA architectures. We will then take an example monolithic application and break it down into a microservices architecture. Next, we will explore the benefits of platforms like Azure Functions, Azure Service Fabric and Docker Containers. Lastly, we will walk through building and running microservices using these tools and platforms.

You will learn:

- An overview of Microservices
- How to Architect Microservices Solutions
- Lap around Microservices Platforms in Azure

W03 Secure Your App with Azure AD B2C

**Introductory / Intermediate**

**OREN NOVOTNY**

**Wednesday, April 24, 8:00 – 9:15am**

Learn how to secure your applications and API’s with Azure AD Business to Consumer (B2C). We’ll introduce Azure AD, OAuth and Open ID Connect and explore how to use B2C to secure your application with both local and social accounts.

You will learn:

- The basics of OAuth and OpenID Connect
- How Azure AD B2C can secure your mobile, web, and API’s
- About the possibilities that the B2C Identity Experience Framework bring for integrating with existing systems and customizing the authentication flows

W13 Fast Focus: Serverless of Azure 101

**Introductory / Intermediate**

**ERIC D. BOYD**

**Wednesday, April 24, 2:00 – 2:20pm**

Learn what serverless compute is all about and how you get started with serverless in Azure. Get an overview of developing and running serverless code in Azure. Explore
how to integrate with other services, and trigger your code from events within and outside of Azure. And leave this session understanding the billing model, so you’re prepared when estimating the cost of your apps.

**W17 Demystifying Microservice Architecture**
*Intermediate*

**MIGUEL CASTRO**  
**Wednesday, April 24, 2:30 – 3:45pm**

Here we go again, another cool buzz phrase. And like many other buzz phrases, it’s often misunderstood. In fact, many developers or even full organizations don’t really have a clear understanding of what Microservices are. The reason is twofold. First, may are too hung up on the technology to use. It’s gotta be REST, they have to be small (it’s micro remember), you gotta use Docker, etc. I’m being sarcastic in case you didn’t notice. The second reason is that devs are not thinking of their systems in a more holistic fashion when trying to fit what they think are microservices into the mix. And no, this way of thinking about a system does not imply a tightly coupled system, don’t worry. This session will not be about code, but more about architecture and design. I’ll tell you what microservices are and what a microservice architecture is and we’ll discuss the characteristics at the service level and with everything that surrounds them in the architecture. We’ll talk about the concept of “design for failure” while covering topics like hosting, discoverability, failover, and the often-confusing API Gateway. These are some of the things you will need to understand before you embark on the adventure that is a microservice architecture and if it’s even something that will work for you.

You will learn:
- Removing technology hangups
- Defining microservices
- Holistic architecture approaches

**W21 Make Your App See, Hear and Think with Cognitive Services**
*Introductory / Intermediate*

**ROY CORNELissen**  
**Wednesday, April 24, 4:00 – 5:15pm**

Artificial intelligence used to be something super complex but Microsoft is making it simple and available for any developer to integrate it in their apps. In this session we’ll look at how you can use features like computer vision, speech recognition and other AI features of cognitive services in your Xamarin Mobile apps. The session will be packed with hands on demos and live coding. After this session you are ready to implement these cool features in your own apps yourself!

You will learn:
- About the possibilities of the Microsoft Cognitive Services platform
- How to use cloud ML services in your mobile apps
- How to take an ML model offline

**TH04 Azure DevOps and AKS**
*Introductory*

**BRIAN RANDELL**  
**Thursday, April 25, 8:00 - 9:15am**

Have you heard? Containers are where it’s at and where you want to run your ASP.NET Core apps on .NET Core. But what’s this K8S thing all about? Will Azure make it easier? In this session, you’ll get a crash course in taking an ASP.NET Core app and get it running up in a container on Azure managed with Kubernetes, all driven from a CI/CD pipeline in Azure DevOps Services.

You will learn:
- How to put a ASP.NET Core app into a Docker container
- How to configure Kubernetes (K8S) in Azure
- How to rub some DevOps on the process with Azure DevOps Services

**AI, DATA, AND MACHINE LEARNING**

Data has once again become one of the hottest topics in our industry. Advances in relational tools like SQL Server are exciting, but then there’s all the cool stuff happening around NoSQL too! And a major driver for all this excitement around data is how it enables AI scenarios and how businesses are rapidly relying on machine learning. There’s no room for anyone to be complacent when it comes to data, and we’re here to keep you up-to-date. This track includes coverage of the following:
- Analytics and AI with Azure Databricks
- Azure Cosmos DB
- Data visualization
- Entity Framework
- Machine Learning Models
- Machine Learning Models Best Practices
- Python
- SQL Server security

**T03 Crack the Code: How Machine Learning Models Work**
*Introductory*

**JEN UNDERWOOD**  
**Tuesday, April 23, 8:00 – 9:15am**

Machine learning is one of the hottest topics in tech today. It is a must-have organizational competency in the data-driven era of digital transformation. Despite the unprecedented speed and ease of creating predictive
models today, the human mind is still essential for generating and maintaining trustworthy machine learning models. In this demo intensive session, we will walk through how machine learning algorithms work. Participants will be introduced to fundamental machine learning terms, concepts, and techniques. We will cover the entire project machine learning life-cycle from selecting the right types of problems to solve to preparing data properly, building models, understanding results, and evaluating model performance.

You will learn:
- Machine learning lingo
- How machine learning models are made
- Tips to avoid making beginner mistakes

**T15  Busy .NET Developer’s Guide to Python**  
*Introductory / Intermediate*

**TED NEWARD**  
*Tuesday, April 23, 3:00 - 4:15pm*

Python is a general-purpose programming language and platform that provides a rich ecosystem of powerful features and libraries. As a dynamically-typed object-oriented language using “significant whitespace” to denote scope blocks (instead of lexical markers), Python is relatively easy for the .NET developer to pick up, and Python’s success in the world of “data science” makes it a great “second language” for any .NET developer.

You will learn:
- To get a handle on Python syntax and semantics
- Python tools and approaches
- About Python as your main data science language

**W02  Power BI: What Have You Done For Me Lately**  
*Intermediate*

**ANDREW BRUST**  
*Wednesday, April 24, 8:00 – 9:15am*

Power BI has been a runaway success in adoption and mindshare, rocketing Microsoft past many of its business intelligence competitors. You may already know Power BI creates great looking visualizations, or that it runs on Windows, iOS, Android, and in the cloud. But do you know how to use it? And if you do, is your knowledge current with all the new features of this product that’s updated on a monthly basis?

Come to this session for a combination quick intro to Power BI (including its technology underpinnings, the costs around it and, of course, how to use it) and primer on several newer features, including data flows, AI features, composite models and Python integration. We’ll even cover features released after this abstract is published.

You will learn:
- Power BI Basics: Reports and dashboards on desktop, cloud and mobile
- New and recent features like data flows and AI integration
- Using Power BI for Big Data analytics with aggregation tables and composite models
- Scripts and visualizations with Python and R

**W06  AI and Analytics with Apache Spark on Azure Databricks**

*Intermediate*

**ANDREW BRUST**
*Wednesday, April 24, 9:30 – 10:45am*

Open source technology Apache Spark as the analytics and machine learning platform of choice for many companies. While Spark has manifested in numerous parts of the Microsoft stack, including SQL Server 2019, Microsoft’s go-to Spark service is Azure Databricks. The service, from Microsoft and Databricks (the company founded by Spark’s creators), is a versatile one, geared towards analytics, data engineering and data science. Azure Databricks lets developers work in notebooks, offline, interactively with running clusters, or schedule them as production jobs that provision Spark clusters on-demand.

This session will cover the concepts, service mechanics, and code necessary for you to do analytics and machine learning on Azure Databricks, and integrate it with other Microsoft cloud services and on-premises technologies.

You will learn:
- About the fundamentals of Apache Spark, Spark SQL and Spark MLlib
- How to use Databricks notebooks
- How to manage clusters and jobs
- How to integrate Azure Databricks with blob storage and Azure Data Lake Store (ADLS)
SESSION DESCRIPTIONS BY TRACK (continued)

- How to write Python code for both analytics and machine learning

W10  Fast Focus: Graph DB from SQL to Cosmos
Introductory / Intermediate
LEONARD LOBEL
Wednesday, April 24, 1:30 – 1:50pm
Relational databases are great at relationships, right? Think again. In fact, things degrade quickly once you need to work with and analyze many interconnected entities in a traditional relational model. At that point, you really need a graph database. Attend this fast-focus session and see how the graph support included in SQL Server 2017 lets you embrace a graph data model without abandoning SQL Server and all of its rich native capabilities. Then we’ll transition to Azure Cosmos DB and its Gremlin API to see how similar graph data models can be implemented in the NoSQL space.

You will learn:
- About NoSQL databases, and Microsoft Azure Cosmos DB
- The differences between NoSQL and relational database platforms, and when to choose one or the other for your next application
- About the unique NoSQL features of Cosmos DB, including global distribution, server-side horizontal partitioning, multi-model support, rich query over schema-free data, client development, server-side programming, tunable consistency, and automatic indexing

W19  Modern SQL Server Security Features for Developers
Introductory / Intermediate
LEONARD LOBEL
Wednesday, April 24, 4:00 – 5:15pm
With the release of SQL Server 2016, the database engine has been greatly enhanced for security, with three new features that you’ll learn about in this demo-packed session. With dynamic data masking (DDM), you can hide sensitive columns from authorized users, but at the row level. With RLS, you can create your own security policy to control which users can read or write specific rows in the table. Finally, Always Encrypted (AE) uses client-side encryption technology that protects data everywhere, both at rest and in-flight.

TH14  Entity Framework for Enterprise Applications
Intermediate
BENJAMIN DAY
Thursday, April 25, 1:30 – 2:45pm
What do you do when your simple Entity Framework app isn’t so simple anymore? The entity relationships are starting to get complex. You’re getting worried about performance problems. Can you even use Entity Framework in a high-performance, scalable web application?

In this session, we’ll go beyond the simple Code First entity framework cases and start get into more complex class designs and relationships. We’ll talk about how to handle the sticky issues around lazy-loading, concurrency, cascading deletes, occasional connectedness, and performance testing. Plus, along the way we’ll talk strategy for DevOps, stored procedures, unit testing, and incremental deployment, too.

You will learn:
- Controlling and planning for unpredictable behaviors like lazy loading & cascading deletes
- Finding performance and concurrency problems in Entity Framework
- Advanced property mappings and associations
DEVELOPING NEW EXPERIENCES

The expectations around "user experience" are being upended right before our eyes. In today’s world you need to understand not only graphical interactions with keyboard, mouse, touch, and stylus, but also gesture, 3D, mixed-reality, and more. Fortunately, we’ve got you covered with content from phones to PCs to augmented and mixed reality.

This track includes coverage of the following:

- Conversational bots
- Cross-platform development with Xamarin and C#
- Google Flutter
- Microsoft Flow
- Microsoft PowerApps
- Tools for Xamarin Developers
- WPF and Windows Forms with .NET Core 3.0
- Xamarin.Forms

T02 Building your First Mobile App with Xamarin Forms
Intermediate
ROBERT GREEN
Tuesday, April 23, 8:00 – 9:15am
Xamarin enables C# developers to reuse their skills and build native mobile apps that run on iOS, Android, and Windows. In this session, you will see how build a relatively simple mobile app from scratch. You will see how to write code once and use it across devices. You will see how to use Xamarin Forms to build the UI once. You will see how to use basic controls, handle navigation and data entry, connect to Azure, work with data when offline and how to deploy the app to multiple devices.

You will learn:
- How to use Xamarin Forms to build mobile apps that run on iOS, Android and Windows
- How Xamarin enables you to share code and UI across devices
- How to connect mobile apps to Azure services

T06 (WPF + WinForms) * .NET Core = Modern Desktop
Introductory
OREN NOVOTNY
Tuesday, April 23, 9:30 – 10:45am
Learn how .NET Core 3 brings WPF and Windows Forms into the future with a modern runtime. See what’s new for WPF and Windows Forms, learn how to easily retarget your .NET Framework application over to .NET Core, and how to get these modern desktop apps to your users.

You will learn:
- How to modernize WPF & WinForms apps to run on .NET Core 3
- Ways to distribute Modern Desktop apps
- What .NET Core 3 means for desktop development

T10 Busy Developer’s Guide to Flutter
Introductory
TED NEWARD
Tuesday, April 23, 3:00 – 4:15pm
Flutter is a new cross-mobile framework and platform (using a custom language, Dart, that started out as a Javascript-transpiling target before it was adopted by Flutter) from Google that looks to solve some of the classic problems—such as state management and component reuse—that the native mobile languages/platforms don’t really solve. In this session, we’ll take a pass through Dart, see how Flutter works, and discuss where this fits in the world next to Xamarin, JavaScript-based toolkits like Cordova, and native Swift/iOS or Kotlin/Android.

You will learn:
- What is Flutter?
- Why do we need this?
- How does Flutter differ from all the others?

T12 Cross-Platform Development with Xamarin, C#, and CSLA .NET
Intermediate
ROCKFORD LHOTKA
Tuesday, April 23, 1:30 – 2:45pm
You may write your smart client app in UWP, Xamarin, WPF, or even Windows Forms. In any case, your app probably calls back-end services and needs to interact with app servers. Some or all of your business logic may run on the client, the app server, or both. That’s ideal for the balance between user interactivity, performance, scalability, and security. The widely-used open source CSLA .NET framework helps you create a reusable, scalable, and cross-platform portable business layer that lets your application run on multiple types of client devices while sharing business logic between the clients and your app server. This session is an end-to-end walkthrough of how this works and how you can benefit.

You will learn:
- About the open source CSLA .NET framework
- How to implement reusable business rules
- How to reuse your business layer across UI platforms

T14 Programming with PowerApps and Microsoft Flow
Introductory
WALT RITSCHER
Tuesday, April 23, 3:00 – 4:15pm
Here’s a familiar scenario. To deal with non-stop email inflow, many of us create rules that manage our inbox.
We’ve got rules that prioritize, categorize, forward, move and delete. But attempt to add even simple logic tests in the rules and you run into a wall. Taking the big tool approach, you can create an Outlook Addin and use the full power of C# to tackle the problem. But not every programming job or workflow needs a high-powered toolset like C# or Visual Studio. For quick one-offs and simple tasks, you can fall back to more basic tools. With the cloud-based Microsoft Flow, you can quickly and easily build custom automations from your desktop, laptop, or mobile device without needing to write a single line of code. And with PowerApps, you can quickly create a mobile friendly UI that taps into company data and your Flows. Behind the scenes is the Common Data service layer; an easy way to merge disparate data sources. Read the marketing claims, Microsoft states that PowerApps is a tool for end-users. However, for those of us who code, Microsoft Flow provides a quick way to create personalized automated workflows between applications. Don’t be too quick to judge, behind the scenes Flow is built on top of Azure Logic Apps. Flow has an impressive list of service providers: like SharePoint, Dynamics 365, Teams, Yammer, Dropbox, Outlook, OneDrive and MailChimp. This session shows how to get started with PowerApps and build interesting integrations with little or no code.

You will learn:
• Explore the Power Platform tools
• Building flows for common business scenarios
• Look at approval and button flows

TH02 Busy Developer’s Guide to Flutter
Introductory
TED NEWARD
Tuesday, April 23, 3:00 – 4:15pm
Flutter is a new cross-mobile framework and platform (using a custom language, Dart, that started out as a Javascript-transpiling target before it was adopted by Flutter) from Google that looks to solve some of the classic problems—such as state management and component reuse—that the native mobile languages/platforms don’t really solve. In this session, we’ll take a pass through Dart, see how Flutter works, and discuss where this fits in the world next to Xamarin, JavaScript-based toolkits like Cordova, and native Swift/iOS or Kotlin/Android.

You will learn:
• What is Flutter?
• Why do we need this?
• How does Flutter differ from all the others?

TH06 The Next Frontier - Conversational Bots
Introductory / Intermediate
SAM BASU
Tuesday, April 23, 9:30 – 10:15am
Bots are apparently the new rage in human-computer interactions, but all you see are nebulous show-off demos. What’s in it for you and why should developers build Bots? Like most new technologies, usage and efficacy often come with deeper understanding.
Let’s demystify Bots – Conversational Bots in particular. Let’s explore where they lead to cost savings for enterprises or drive greater user engagements. Let’s explore several developer frameworks to build Bots and learn how/where to host them. The true power of Bots lies in how intelligent they get, the UI through which they provide the user experience and how well they mimic natural human conversations. Let’s explore tools and services that enable developers to build smarter Bots – aka, the next generation of apps. Let’s stop reinventing the wheel and ship apps faster – the right tools help!

You will learn:
• About conversational Bots
• How to host and hook up Bots to services
• See demos of Chatbots & AI usage within Xamarin apps

TH10 Essential Tools for Xamarin Developers!
Intermediate
SAM BASU
Tuesday, April 23, 11:00am – 12:15pm
Cross-platform mobile development has been democratized for .NET developers – thanks to Xamarin & Microsoft. However, professional Xamarin development isn’t a piece of cake. Sure, tooling has come a long way, but successful mobile apps need a lot more. The whole Xamarin technology stack needs deep understanding. Do you know what platforms you can target & how to maximize code reuse? Let’s do a run-down of the essential tools, frameworks and utilities that should be in every Xamarin developer’s arsenal. The ubiquitous IDEs, necessary plugins, cloud backends, deployment tools, testing solutions, network utilities, DevOps workflows and polished UI – all ready for your app development pleasure. How about adding some cloud-powered AI or Alexa voice assistance or Conversational chatbots to your app? What can you do to delight your users, maintain developer sanity and deliver high quality apps? Let’s stop reinventing the wheel and ship apps faster – the right tools help!

You will learn:
• Xamarin ecosystem & tools
• Explore cloud backends & services
• See demos of Chatbots & AI usage within Xamarin apps
DELIVERY AND DEPLOYMENT

Every developer knows that there’s more to software development than just code and tooling. The practices and techniques we use to understand and analyze the problem space, to manage interpersonal communication and conflict, and other patterns and practices, are key to success. Modern software teams understand that people are the difference and building better teams means building better solutions.

Topics in this track include:

- Test Driven Development
- Developer interview techniques
- Presenting tips for nerds
- UX design fundamentals
- Windows Subsystem for Linux for developers

W12  Fast Focus: Ultimate Presentation Formula for Nerds

**Intermediate**
**JUSTIN JAMES**

**Wednesday, April 24, 2:00 – 2:20pm**

As a techie, we need to be able to talk to more than just 1s and 0s. Talking to computers is great but we also need to be able to talk to humans and give an effective presentation if we want to be seen as the go to expert. Join me in this interactive session to get the critical techniques I used to grow from 0 talks to giving 200+ talks at over 75 events around the world.

Public speaking just like talking is a skill that can be learned with the right training and mentorship. Being shy and introverted doesn’t have to doom you to a life of only talking to computers even though it is really cool to talk to computers.

You will walk away inspired to share your knowledge and be seen as the go to expert.

You will learn:

- Be able to stand out from the typical corporate presentation
- Walk away with 3 changes you can instantly make for a greater impact
- Get a formula that you can use to quickly put together an awesome talk

TH04  UX Design Fundamentals: What Do Your Users Really See?

**Introductory**
**BILLY HOLLIS**

**Thursday, April 25, 8:00 – 9:15am**

Developers are often unaware of how their users actually see their screens. In this UX design session, we’ll discuss the most important principles concerning how the human brain and visual system determine how users see application interfaces. We’ll look at Gestalt principles for grouping and highlighting, inattentional blindness and change blindness, how users scan through a view, and how to promote clarity in interfaces with levels of emphasis.

Tests will help attendees see how they personally experience these principles, and better understand the challenges faced by their users when views and pages are not designed to respect design principles.

You will learn:

- Understand limitations in the human visual system for experiencing computer screens
- Principles to leverage the human visual system for better and faster understanding of interfaces
- Comparisons of real app views done badly and redesigned to be better

TH08  Calling All Developers - Get Your Bash on with WSL

**Introductory to Intermediate**
**BRIAN RANDELL**

WSL or the Windows Subsystem for Linux brings a real bash shell to Windows 10 and Windows Server. In this session Brian will take you from nothing to something and show you all the wonderful things you can do to live a heterogeneous developer lifestyle accessing Azure, Docker, and Linux servers all from the warm, comfort of Windows 10. Come see how the command-line has changed and how you too can unleash the power as part of your modern, development workflow.

You will learn:

- How to install and configure WSL
- Ways to leverage command-line tools in your day-to-day development
- Use WSL with Visual Studio Code to target Linux environments

TH12  How to Interview a Developer

**Introductory / Intermediate**
**BILLY HOLLIS**

**Thursday, April 25, 11:00am – 12:15pm**

Most developers end up interviewing candidates for their team at some point, but few receive any instruction in how to do it. In this session, a veteran team leader and developer with over 400 interviews under his belt will cover the basics, including general approach, questions to ask, and other tips for more reliable evaluation before, during, and after interviews. Previous attendees for this session have said it yielded many tangible benefits to their team, including an increase in their retention rate.

You will learn:

- Preparation you need to take to make an interview productive
SESSION DESCRIPTIONS BY TRACK (continued)

- Potential questions to ask interviewees, and what each question is designed to discover
- How to avoid tipping off interviewees about the answers you’d like to hear

**TH16 Building, Debugging & Deploying Containerized .NET Apps in Visual Studio**
Paul Yuknewicz
Thursday, April 25 1:30 - 2:45pm

In this talk we’ll demonstrate the various tools and techniques for building, debugging, and deploying containerized .NET apps using Visual Studio and Azure. We will show a continuum of debugging options including Docker, Docker Compose, and Kubernetes via Dev Spaces. For the first time in public we will also reveal new tooling that will help you test and diagnose your containerized apps. Lastly, we will review the various options for deploying your containerized apps in Azure.

**TH19 Unit Testing & Test-Driven Development (TDD) for Mere Mortals**
Benjamin Day
Intermediate
Thursday, April 25, 3:00 – 4:15pm

Unit Testing and Test-Driven Development (TDD) arguably mean the same thing. They both describe a way of developing software so that you always know whether or not it’s working. You write little chunks of code (unit tests) that verify the objects and methods in your application’s code and it helps you make sure that you have PROOF that your code works. It also makes your code easier to maintain and easier to refactor. Plus, while it might not feel like it right away, writing using tests makes your development process go a lot faster.

In this session, Ben will discuss what unit testing & TDD are all about, why you should care, and how to do it with C# and ASP.NET MVC. Along the way, expect to hear about “designing for testability” and some really helpful testability design patterns like the Strategy, Repository, and Adapter patterns.

You will learn:
- Why write unit tests
- How to write unit tests
- How to think about technical debt and code written without unit test and making it testable.

**.NET CORE AND MORE**

At the heart of the Microsoft development experience is the .NET Framework. But these days there’s so much more than just that original framework. You also need to understand .NET Standard and .NET Core, not to mention the cool features added to C#, Roslyn and Visual Studio. These are the base-level tools you need to know for success in the Microsoft development world.

**T04 Unit Testing Makes Me Faster: Convincing Your Boss, Your Co-Workers, and Yourself**
Introductory / Intermediate
Jeremy Clark
Tuesday, April 23, 8:00 – 9:15am

Bosses hate unit testing. They see it as code that doesn’t contribute to the final product. And maybe you see testing that way, too. But here’s the truth: unit testing makes us faster. We’ll look at specific examples of how unit tests save time in the development process by letting us code more confidently, catch bugs earlier, and minimize manual testing. With this in hand, we can show our boss (and ourselves) how unit testing makes us faster.

You will learn:
- Increase confidence and reduce manual testing with automated unit tests. Result: Go faster.
- Catch bugs early in the development life-cycle with automated unit tests. Result: Go faster.
- Reduce the number of regression bugs when changing existing code. Result: Go faster.

**T16 Get Func-y: Understanding Delegates in .NET**
Introductory / Intermediate
Jeremy Clark
Tuesday, April 23, 3:00 – 4:15pm

Delegates are waiting to make our code more flexible and extensible. We’ll take a look at what delegates are and dispel the mystery of the built-in Func and Action delegate types. Jumping into code, we’ll use them to make our classes more flexible and even use multi-casting to kick off a series of operations with a single call. Along the way, we’ll see that lambda expressions can add readability to our code (yes, I actually said that). And this
SESSION DESCRIPTIONS BY TRACK (continued)

TH02 Diagnosing and Debugging ASP.NET Core Apps in Production
Intermediate
Catherine Wang & Paul Yuknewicz
Thursday, April 25, 8:00 – 9:15am
Experiencing intermittent and pesky problems in your production environment? Join us in this session where we will look at real Azure ASP.NET Core production problems and how we can leverage a number of deep diagnostics tools to get to root cause quickly. We will cover monitoring and detection tools all the way to low level debugging tools such as the snapshot debugger, profiler and natively exposed diagnostics information from the CLR itself.

You will learn:
• How new C#8 features work
• Understand what the features provide to use them effectively
• Gain insight into the OSS world of C# and how one can be a part of future language evolution

TH07 Porting Your Code from .NET Framework to .NET Standard
Intermediate
Rockford Lhotka
Thursday, April 25, 9:30 – 10:45am
The future of .NET is .NET Core and .NET Standard. Learn how the large codebase of CSLA .NET was adapted to support .NET Standard 1.5, 1.6 and 2.0 while continuing to support full .NET (and Xamarin and UWP).

You will learn:
• How .NET Core relates to .NET Standard
• How to migrate .NET Framework code to .NET Standard
• How to share code between editions of .NET

TH11 What’s New in C# 8
Intermediate
Jason Bock
Thursday, April 25, 11:00am – 12:15pm
C# is an open-source, mature object oriented language, used by millions of .NET developers, yet its evolution is still underway. In this session, we’ll cover the latest features that have been added to C#8 and how they work in detail so you’ll know when to use them effectively in your new .NET projects. You’ll also see the direction C# may be going with future versions of C#.

You will learn:
• What Extensibility is for
• How to Modularize your application
• Exposing an extensibility API in your application

TH15 Exposing an Extensibility API for your Applications
Intermediate
Miguel Castro
Thursday, April 25, 1:30 – 2:45pm
Writing software that can be maintained is and always has been crucial. But so is writing software that can be enhanced and extended. It’s become quite commonplace for many apps today to expose APIs so externally written apps can have access to their data or their services. But imagine how cool it is to expose an API for changing or extending an application’s functionality. I’m talking about the ability to use the architecture of an application in order to enhance that system. This is the power of the patterns and techniques I’m going to show you in this session. They’re very useful and very geeky so bring your propeller hat.

You will learn:
• What Extensibility is for
• How to Modularize your application
• Exposing an extensibility API in your application

W11 Fast Focus: What’s New in EF Core 2.x
Jim Wooley
Wednesday, April 24, 1:30 – 1:50pm
Entity Framework Core, Microsoft’s Object Relational Mapping data access tool, was re-written from the ground up with .NET Core. By taking a fresh look, a number of features were changed and re-thought. This redesign caused it to continue playing catch-up to features added in 10 years of development leading up to EF6, while also exploring new programming options that have popularized since the original design came out, including non-relational data stores. In this fast focus session, we’ll explore the additions to EF Core 2 and beyond and how they can impact your application decisions. This whirlwind tour will include such topics as Table Splitting, Owned Types, Query Filters, DbContext pooling, GroupBy, String Interpolation, Lazy loading, Value Converters, Data Seeding, Query types, Optimized correlated subqueries, Spatial support, and Query Tags.

You will learn:
• Explore the new features of EF Core 2.0
• New enhancements in EF Core 2.1
• Discover the EF Core 2.2 additions

is a great jumping off point for heading into LINQ, parallel programming, and functional programming.

You will learn:
• Understanding what delegates are
• Using delegates for extensibility
• Getting a handle on Func, Action, and lambda expressions
SESSION DESCRIPTIONS BY TRACK (continued)

**TH16 Building, Debugging & Deploying Containerized .NET Apps in Visual Studio**

PAUL YUKNEWICZ

Thursday, April 25, 1:30 - 2:45pm

In this talk we’ll demonstrate the various tools and techniques for building, debugging, and deploying containerized .NET apps using Visual Studio and Azure. We will show a continuum of debugging options including Docker, Docker Compose, and Kubernetes via Dev Spaces. For the first time in public we will also reveal new tooling that will help you test and diagnose your containerized apps. Lastly, we will review the various options for deploying your containerized apps in Azure.

You will learn:
- Understand why code quality matters regardless of team size
- How to use analysis tools and linters to automate repetitive code review tasks and learn about industry standard best practices
- Discover how to customize existing tools to meet your team’s specific needs

**F03 Workshop: Cross-Platform C# Using .NET Core, Kubernetes, and WebAssembly**

ROCKFORD LHOTKA & JASON BOCK

Friday, April 26, 8:00 am - 5:00pm

We have entered an era where Microsoft .NET runs everywhere -- on servers and client devices. Windows, macOS, iPhone/iPad, Android, Linux and other platforms are now supported. Increasingly we’re running server-side code in container-based environments such as Docker and Kubernetes. Perhaps even more exciting is the standards-based WebAssembly (wasm) platform, allowing front-end Web development to be done in languages other than JavaScript, including C, C++, Go, Rust and C#.

Yes, .NET now runs in the browser using native browser capabilities -- no plug-ins are needed.

In this workshop Rocky and Jason will show you how to build C# and .NET code that runs cross-platform on Windows, Linux, Docker/Kubernetes, macOS, iOS, Android and in the browser. You’ll learn how to leverage .NET Core, .NET Standard, Visual Studio, Visual Studio Code, Docker, and many other tools and technologies to build apps and services for each platform. Perhaps more important, you’ll learn how to share common code across all these platforms, and techniques for when you need to also leverage platform-specific code.

You will learn:
- How to build C# and .NET code that runs cross-platform on client and server
- How to leverage .NET Standard and .NET Core
- How to share common code across platforms

**TH20 Improving Code Quality with Static Analyzers**

JIM WOOLEY

Thursday, April 25, 3:00 – 4:15pm

How do you keep code consistent across a team or make sure your independent code follows accepted standards, use a Static Analyzer tool. See how to use some of these tools for your .Net, JavaScript, Style sheets, etc. to improve your code as an independent or large team lead.

Whether you’re an independent developer that needs assistance reviewing your code, or a member of a large team that wants to keep code consistency among the team, static analyzer tools can help identify and optionally fix issues in your code. Many platforms have their own version to help based on the language, including Roslyn, JsLint,CssLint, SonarQube, FxCop, StyleCop, etc. We’ll take a look at some of these tools and explore how they can help identify issues in your code and improve maintainability and decrease errors before you deploy to production.

We’ll also look at the ability to build your own tool to enforce rules in your specific domain.

**FULL STACK WEB DEVELOPMENT**

Web development has become the dominant approach for building enterprise software. To provide your best on every project, you need to understand the server and browser client worlds. On the server there's ASP.NET classic, and ASP.NET Core, both with versions of MVC and support for building services. The browser client is evolving rapidly, with constant changes and updates to JavaScript, TypeScript, Angular, Vue, and other related frameworks. But more than this, there’s now WebAssembly and the ability to run other languages natively in the browser, including C/C++, C#, and many more. Your need to keep up-to-date with all these technologies has never been greater, and we’re here to give you the knowledge you need!

Topics in this track include:
- ASP.NET Core 2
- Angular
- Angular Unit Testing
- Bootstrap 4
- Blazor
- Signal R
- CSS
- SASS
- TypeScript
- WebAssembly
- Advanced Fiddler
SESSION DESCRIPTIONS BY TRACK (continued)

**T01 Moving to ASP.NET Core 2.X**
Introductory / Intermediate

PHILIP JAPIKSE
Tuesday, April 23, 8:00 – 9:15am

In this session, I show you how ASP.NET Core implements the Model View Controller pattern for Web Applications and the Model Controller pattern for Restful services. I cover convention over configuration, implementing Controllers and Action methods, Views (including partial views and layouts), Routing, and much more. This session is designed for developers new to the ASP.NET MVC and WebAPI frameworks.

You will learn:
• The ASP.NET Core MVC Implementation
• Routing, Controllers, Actions, Views
• Convention over Configuration

**T05 Getting Started with ASP.NET Core 2.0 Razor Pages**
Introductory

WALT RITSCHER
Tuesday, April 23, 9:30 – 10:45am

Razor Pages are a new feature of ASP.NET Core 2.0 that brings a simple page-based development model to .NET Core. While they’re similar to Razor Views in MVC, they have interesting differences. Essentially, they’re the preferred way to generate server-side HTML content in the Microsoft MVC world.

This session explores how the Pages framework operates and how it fits into the standard ASP.NET Core MVC infrastructure. I’ll look at scenarios where Razor pages are a good choice and discuss when it’s best stick with MVC. You’ll see how all your favorite concepts (like model binding, validation, filters, routing and action results) work in this new system. And you’ll see how Razor pages simplify many common tasks when building basic Web pages.

You will learn:
• How Razor Pages fit into the ASP.NET MVC Core framework
• How handlers work in Razor code
• About controllerless MVC

**T09 Diving Deep into ASP.NET Core 2.x**
Intermediate / Advanced

PHILIP JAPIKSE
Tuesday, April 23, 1:30 – 2:45pm

ASP.NET Core has changed development of web applications and Restful services in revolutionary ways. In this session I show you what you need to know to move to ASP.NET Core.

You will learn:
• New ASP.NET Core Features
• Using DI with ASP.NET Core
• Configuration and Environmental awareness, plus much more!

**T13 Up and Running with Angular in 60 Minutes**
Introductory

JUSTIN JAMES
Tuesday, April 23, 3:00 – 4:15pm

If you have been thinking about learning Angular, now is your chance. Take your Angular knowledge from 0 to 60 in just 1 hour. We will take a stroll through the concepts that you need to know like modules, components, services, routes, and guards to be able to create any Angular application. Then we will make a quick stop at the Angular CLI to take a look around at all of the fantastic functionality and productivity it provide us. Finally, we will finish our stroll through Angular looking at some real world code examples. You will walk away with the knowledge and resources you need to immediately start coding your own Angular applications. See you there to jump start your Angular development.

You will learn:
• Understand how to get start with Angular
• Understand how all of the parts of Angular place together
• Understand why you need TypeScript and what it does for you

**W01 Angular Unit Testing from the Trenches**
Introductory / Intermediate

JUSTIN JAMES
Wednesday, April 24, 8:00 – 9:15am

For a number of years now we have been hearing about all of the benefits that automated unit testing provides like increasing our quality, catching errors earlier, ensuring that all developers are testing in the same manner and deploying updates with high confidence that nothing will break. Testing a Web UI though was difficult and fragile which meant that typically we had no automated unit test for our Web UI. This is no longer the case with the latest release of Angular. Unit testing is now a first class citizen in Angular.

Out of the box, the project generated by the Angular CLI has unit testing setup with Karma and Jasmine and includes sample tests. Generating new components, services, and pipes includes the unit test Spec file already wired up. Thus allowing you to focus on writing your unit tests and not on the infrastructure needed to get them running. The barriers to writing unit test have been destroyed.

This talk will walk through getting started unit testing your Angular components, services, and pipes. Along the way I will share the tips and tricks that I have learned as I have implemented unit testing on my Angular projects at a Fortune 100 company. You will walk away ready to immediately implement unit testing on your Angular project.

You will learn:
• Understand what is possible to unit test with Angular
• Understand how to actual create and run Angular unit tests
• Understand what issues you may encounter as you start creating your own unit tests and how to work around them
W05 TypeScript: Moving Beyond the Basics  
*Intermediate / Advanced*

ALLEN CONWAY  
Wednesday, April 24, 9:30 – 10:45am

So you have the basics down in TypeScript fundamentals and have even begun creating applications using this wonderful language. However being stuck with just the basics does not allow you to unlock the full power that TypeScript has to offer. With a dizzying array of new features constantly being released from the TypeScript team, there is always something new to help with your app development. In this session, we will go beyond the basic language features and dig into new territory like advanced types, decorators, mixins, symbols, generics, iterators, and declaration merging to further your understanding of the wide variety of TypeScript features.

You will learn:
- About additional TypeScript language features beyond the fundamentals
- How to leverage more advanced TypeScript features for real-world applications
- About new features available in the TypeScript language

W09 Fast Focus: Hybrid Web Frameworks  
*Introductory*

ALLEN CONWAY  
Wednesday, April 24, 1:30 – 1:50pm

Hybrid Web Frameworks give developers an option to create cross-platform applications using common web technologies. By working with a single codebase consisting of JavaScript, HTML, and CSS to reach both Android and iOS, your team can cut down development time and reach beyond browser-based web only applications. In this session we’ll discuss some of the mainstream frameworks like Cordova/PhoneGap, Kendo UI, and Onsen UI to see how they can be leveraged to build hybrid web applications. We’ll also look briefly at the differences between “Hybrid Web Frameworks” and “Native Mobile Frameworks” and the pros and cons of each.

You will learn:
- About the basics of Hybrid Web Frameworks
- About the differences between web, native, and hybrid implementations
- The basics of building a Cordova based app in Visual Studio Code

W16 Migrating from AngularJS to Angular + TypeScript  
*Intermediate*

ALLEN CONWAY  
Wednesday, April 24, 2:30 – 3:45pm

You may have already invested a lot of time and effort into building an AngularJS 1.x app, and haven’t cut your teeth into migrating to Angular and TypeScript. With the Angular Upgrade library, we can bootstrap our Angular app as an Angular + AngularJS Hybrid app, and allow ourselves to migrate over time fully to Angular. The advantage of migrating is once converted to Angular + TypeScript, you will more easily be able to consume newer versions of Angular and TypeScript on regular intervals as well as take advantage of the newest framework and language benefits. In this session we will take a look at an AngularJS application and see the steps involved in migrating our application to the current version of TypeScript using Angular.

You will learn:
- Understand options available for migrating from AngularJS to Angular
- How to leverage the Angular Upgrade Module
- Steps required for migrating an AngularJS application to Angular

W20 Getting Pushy with SignalR and Reactive Extensions  
*Introductory*

JIM WOOLEY  
Wednesday, April 24, 4:00 – 5:15pm

As our systems increasingly demand more real-time updates, we need better ways of working with these live streams of information. Traditional pull models fail to provide the real-time responsiveness and scale needs that modern systems expect. Moving to a push model allows us to scale easier and react to new data as it becomes available. SignalR facilitates push notifications over HTTP to a variety of clients. The Reactive Extensions were designed to allow for asynchronous LINQ over push based collections. In this talk, you’ll see how the synergy of these two technologies merge to make otherwise difficult tasks, a push over.

You will learn:
- How to use SignalR to push streams of data over HTTP
- How to use Rx to simplify programming over streams of data
- How to combine SignalR and Rx to create elegant, maintainable coding APIs over otherwise complex real-time data streams
and responses with breakpoints, the auto responder, and a visual composer. Review popular extensions for formatting JavaScript, syntax highlighting, and detecting image bloat. Go beyond the basics and learn the full capabilities of the tool and how it can improve your web development and debugging techniques today!

**You will learn:**
- How to troubleshoot problems on phones, tablets and non-Windows devices
- How to find extensions that add new capabilities to Fiddler
- How to manipulate requests and responses to see how the browser and Web server will act differently

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**TH05  SASS and CSS for Developers**  
*Intermediate*

**ROBERT BOEDIGHEIMER**  
Thursday, April 25, 9:30 – 10:45am

Web developers use CSS every day, but few understand how it works. Learn how to leverage CSS to separate your content and presentation. Review selectors, inheritance, and common techniques for providing for a flexible layout. Discover recent improvements, what browsers support them, and how to handle those that don’t. See how to maximize performance when using CSS via proper use of HTTP compression, minification, and expirations. Lastly examine how SASS can simplify CSS and provide many of its missing features.

**You will learn:**
- Discover the latest features available in CSS 3
- Learn how SASS can improve the capabilities of CSS
- Find new ways to layout pages

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**TH09  Upload and Store a File Using MVC**  
*Introductory / Intermediate*

**PAUL SHERIFF**  
Thursday, April 25, 11:00am – 12:15pm

Many web applications require the user to upload files. The HTML file input allows the user to select a file from their hard drive, but how do you then upload that file? What are the best practices? How can you limit the file size? How can you style the control to match the rest of your site? All of these questions and more will be answered in this step-by-step seminar on how to use the HTML file input control effectively.

**You will learn:**
- Style the HTML file input control
- Create a thumbnail of an uploaded image
- Store the uploaded file into a SQL Server table

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**TH13  Blazing the Web - Building Web Applications in C#**  
*Introductory / Intermediate*

**JASON BOCK**  
Thursday, April 25, 1:30 – 2:45pm

With WebAssembly, creating web applications can be built with any programming language; JavaScript is no longer the only choice. In this session, you’ll see how you can use Blazor to run C# natively in the browser. We’ll also cover Razor Components, JavaScript interop, server-side Blazor, and so much more!

**You will learn:**
- Understand what WebAssembly is
- See Blazor in action
- Gain insight into the features Blazor provides

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**TH17  What’s New in Bootstrap 4**  
*Introductory / Intermediate*

**PAUL SHERIFF**  
Thursday, April 25, 3:00 – 4:15pm

Bootstrap 4 has been recreated from the ground-up using CSS 3 features such as Flexbox. As such, it only supports the latest, stable releases of all major browsers. On Windows, this means only IE 10, 11 and Edge. Many of the old, familiar CSS classes are still available, but have been modified slightly in some cases. And, there are cases where things should be done a little differently. This course provides you with an overview of how to lay out your web pages using Bootstrap 4, while pointing out the differences from Bootstrap 3.

**You will learn:**
- Introduction to Bootstrap 4
- What’s different from Bootstrap 3
- New features in Bootstrap 4

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CONFERENCE ADVISORY BOARD

Andrew Brust  
CEO and Founder, Blue Badge Insights  
Visual Studio Live! Conference Co-Chair  
Andrew Brust is the founder and CEO of Blue Badge Insights. He advises data and analytics ISVs on winning in the market, solution providers on their service offerings, and customers on their analytics strategy. He writes about Big Data for ZDNet and co-chairs the Visual Studio Live! series of developer conferences. Andrew is an entrepreneur, a consulting veteran, a former analyst and research director, and a current Microsoft Regional Director and MVP. @andrewbrust

Michael Desmond  
Editor in Chief, MSDN Magazine  
Michael Desmond is editor in chief of MSDN Magazine, Microsoft’s flagship publication for software developers working with Microsoft tools and technologies. A 20-year veteran of IT and technology publishing, Desmond was an editor at PC World magazine for six years before launching an editorial consultancy that worked for leading technology firms like IBM, Intel, and Sun Microsystems.

Rockford Lhotka  
CTO, Magenic  
Visual Studio Live! Conference Co-Chair  
Rockford Lhotka is the CTO of Magenic, and the creator of the widely used CSLA .NET development framework. He is the author of numerous books on software development and regularly speaks at major conferences around the world. Rockford is a Microsoft Regional Director and MVP. His company Magenic (magenic.com) specializes in planning, designing, building, and maintaining an enterprise’s most mission critical systems. For more information, go to lhotka.net. @RockyLhotka

David Ramel  
Editor in Chief, Visual Studio Magazine and ADTMag.com  
David Ramel is editor in chief of Visual Studio Magazine and Application Development Trends Magazine. He is an editor, writer and Web multimedia producer with 20 years of experience in mainstream journalism and within the information technology trade industry.

Brian Randell  
Partner, MCW Technologies  
Visual Studio Live! Conference Co-Chair  
Brian A. Randell is a partner with MCW Technologies, LLC. For more than 20 years, he has been building software solutions. He educates teams on Microsoft technologies via writing and training—both in-person and on demand. He’s also a consultant for worldwide companies of all sizes including Fortune 100 companies like Microsoft. Brian is a passionate software craftsman who still enjoys coding as he helps teams to improve their processes from idea to shipping to production management and monitoring. He’s currently a Visual Studio MVP and co-author of “Professional Application Lifecycle Management with Visual Studio 2013” from Wrox Publishing. When he’s not working, Brian enjoys spending time with his wife and two children. @brianrandell

“I LEARNED MANY USEFUL PIECES OF TECHNOLOGY. I LEARNED A HANDFUL OF TECHNOLOGY TID-BITS I AM ABLE TO USE IMMEDIATELY.”  
— Christopher Speirs
CONFERENCE SPEAKERS

Sam Basu
Developer Advocate, Telerik

Sam Basu is a technologist, author, speaker, Microsoft MVP, gadget-lover and Progress Developer Advocate for Telerik products. With a long developer background, he now spends much of his time advocating modern web/mobile/cloud development platforms on Microsoft/Telerik technology stacks. His spare time calls for travel, fast cars, cricket and culinary adventures with the family. You can find him on the internet.

Jason Bock
Practice Lead, Magenic

Jason Bock is a practice lead for Magenic (http://www.magenic.com) and a Microsoft MVP (C#). He has more than 20 years of experience working on a number of business applications using a diverse set of frameworks and languages such as C#, .NET, and JavaScript. He is the author of “.NET Development Using the Compiler API,” “Metaprogramming in .NET,” and “Applied .NET Attributes.” He has written numerous articles on software development issues and presented at a number of conferences and user groups. He is a leader of the Twin Cities Code Camp (http://www.twincitiescodecamp.com). Jason holds a Master’s degree in Electrical Engineering from Marquette University. Visit his web site at http://www.jasonbock.net @jasonbock

Robert Boedigheimer
Principal Systems Developer, Schwans Shared Services, LLC

Robert Boedigheimer works for Schwans Shared Services, LLC providing business solutions with web technologies. Robert has been developing web sites for the past 23 years. He is a Microsoft ASP.NET MVP, a Progress Developer Expert (Fiddler), a Pluralsight author, and a 3rd degree black belt in Tae Kwon Do. Robert regularly speaks at national and international events. @boedie

Eric D. Boyd
Founder & CEO, responsiveX

Eric D. Boyd is the founder and CEO of responsiveX, a Microsoft Azure MVP, a Microsoft Regional Director, a regular conference speaker, and the co-author of “Step-by-Step Azure SQL Database” from Microsoft Press. He is so passionate about cloud, mobile, and modern applications that he founded responsiveX (www.responseX.com), a technology company that helps customers deliver great web, mobile, and enterprise apps using the cloud and Azure. Eric launched his technology career almost two decades ago with a web development startup and has served in multiple roles including developer, consultant, technology executive, and business owner. You can find Eric blogging at http://www.EricDBoyd.com and on Twitter at http://twitter.com/EricDBoyd.

Andrew Brust
CEO and Founder, Blue Badge Insights
Visual Studio Live! Conference Co-Chair

Andrew Brust is the founder and CEO of Blue Badge Insights. He advises data and analytics ISVs on winning in the market, solution providers on their service offerings, and customers on their analytics strategy. He writes about Big Data for ZDNet and co-chairs the Visual Studio Live! series of developer conferences. Andrew is an entrepreneur, a consulting veteran, a former analyst and research director, and a current Microsoft Regional Director and MVP. @andrewbrust

Miguel Castro
President, Melicorpc LLC

Miguel Castro is an architect, developer, and trainer with more than 30 years of experience in the software industry. He’s a Microsoft MVP for 12 years running, a Microsoft Regional Director, and a member of several of the Microsoft Insider groups. With a Microsoft background that goes all the way back to VB 1.0 (and QuickBasic in fact), Miguel speaks regularly at numerous user groups, code camps, and conferences in the U.S. and abroad. He has also been featured on several technology talk shows and is a Pluralsight author. He specializes in architecture and development consulting and training with emphasis on Microsoft technologies. @miguelcastro67

Jeremy Clark
Developer Educator

Jeremy Clark makes developers better. By drawing on more than 15 years of experience in application development, he helps developers take a step up in their skillset with a focus on making complex topics approachable regardless of skill level. He is a Microsoft MVP for .NET, and has authored seven courses for Pluralsight, including “C# Interfaces,” a course aimed at giving developers a clear understanding of abstraction. He loves speaking and has delivered more than 200 technical presentations in the last eight years throughout the United States and Europe. Jeremy lives in the northwestern United States with his lovely partner, two dogs, two cats, and a banjo. @jeremybytes

Allen Conway
Senior Consultant, Magenic Technologies

Allen Conway is a Senior Consultant for Magenic (www.magenic.com) that is an advocate of Microsoft .NET technologies and the Microsoft platform both professionally and personally. He enjoys the challenge and creativity behind software engineering, and hopes to give back to others in the community by speaking and on this blog at http://allen-conway-dotnet.blogspot.com. @AllenConway
Roy Cornelissen
Lead Consultant, Xpirit

Roy Cornelissen is a total foodie with serious cooking skills, a leisure guitar player, aspiring graphic artist, and a professional mobile and distributed software architect with a healthy allergy for over-engineering—in that order. At Xpirit, he helps customers make the most out of their digital innovation platform using modern mobile technologies. Roy has a strong focus on Xamarin and NServiceBus technologies. @roycornelissen

Benjamin Day
Consultant / Trainer

Benjamin Day is a consultant and trainer specializing in software best practices using Scrum with Microsoft’s DevOps tools. Ben’s main areas of emphasis include Team Foundation Server, Scrum, software testing, and software architecture. He is a Microsoft Visual Studio ALM MVP, a certified Scrum trainer via Scrum.org, and a speaker at conferences such as TechEd and Visual Studio Live! When not developing software, Ben’s been known to go running and sea kayaking in order to balance out his love of cheese, cured meats, and champagne. He can be contacted via http://www.benday.com, @benday

Marcel de Vries
CTO, Xpirit

Marcel is the co-founder and CTO of Xpirit, a high-end consulting firm based in Hilversum, Netherlands. Marcel co-founded Xspirit in 2014 as a spin off from Xebia, which is also in the Netherlands. Together with Xebia, they help customers with digital transformation, agile consulting, and full stack development with both Microsoft and open source products. Marcel spends most of his time looking at how new emerging technologies, a shift in mindset, and a new way of work can help organizations get software in production faster. Helping organizations transform towards a high speed, innovative, and productive organization has become his passion. Marcel loves to learn new technologies and teach others what he has learned. Besides his work as CTO, he also works as a consultant in the field of application lifecycle management (ALM), continuous delivery, DevOps, cloud/web scale application architectures, and cross-platform enterprise mobile app development with Xamarin. Marcel is a frequent speaker at leading industry conferences. He has delivered sessions at events like Microsoft /Build, Microsoft TechDays, Visual Studio Live!, Xebicon, and Techorama to name a few. He hosts several meetups in his region on Microsoft Azure, Xamarin, and ALM. In his spare time, he builds online courses for Pluralsight. Marcel has been awarded by Microsoft the Microsoft ALM MVP award for more than 10 consecutive years and has been a Microsoft Regional Director since 2008. You can always contact him to talk about subjects like DevOps, ALM, Cloud Computing, Microservices, Mobile Development, Docker, IaaS, PaaS, and SaaS. @marcelv

Mickey Gousset
DevOps Architect, Microsoft

Mickey Gousset is a DevOps Architect at Microsoft. He was formerly a Microsoft Visual Studio and Development Technologies MVP (for 13 years). Mickey has been lead author of several books, including “Professional Application Lifecycle Management with Visual Studio 2013” from Wrox Publishing. He is very passionate about DevOps and the cloud, and speaks on DevOps and Cloud topics at various user groups, code camps, and conferences around the world. Learn more about Mickey at http://mickeygousset.com, @mickey_gousset

Robert Green
Program Manager, Evangelism, Microsoft

Robert Green is a Program Manager Evangelism in the Developer Experience and Evangelism (DX) group at Microsoft. He focuses on Visual Studio and mobile development. Robert is the host of the Visual Studio Toolbox show on Channel 9. @rogreen_ms

Billy Hollis
XAML slinger

Billy Hollis is a software designer and developer with a contrarian streak that often challenges conventional wisdom in the industry. He has a consulting practice in Nashville, Tennessee. He and his team focus on user experience design (UX), advanced user interface development, rules-based architectures, and healthcare systems. He teaches design classes for UX and technical classes on XAML for the Universal Windows Platform and XAML for WPF. @billyhollis

Justin James
Founder, Let Your Nerd Be Heard

Justin is the founder of Let Your Nerd Be Heard, creator of the Ultimate Presentation Formula for Nerds, Award Winning Entrepreneur, Amazon #1 Best Selling Author and a Microsoft MVP. He is hired by techie nerds to get them confidently on stage speaking to more than 1s and 0s and seen as the go to expert. @nerdbeheard

Philip Japikse
Developer, Coach, Author, Teacher

An international speaker, Microsoft MVP, ASPInsider, MCSD, CSM, and CSP, and a passionate member of the developer community, Phil Japikse has been working with .NET since the first betas. He has been developing software for more than 30 years and has been heavily involved in the agile community since 2005. Phil is co-author of the best-selling “C# and the .NET 4.6 Framework” (http://bit.ly/pro_csharp), the lead director for the Cincinnati .NET User’s Group (http://www.cinnug.org) and Cincinnati Software Architect Group, co-hosts the Hallway Conversations podcast (http://www.hallwayconversations.com), founded the Cincinnati Day of Agile (http://www.dayofagile.org), and volunteers for the National Ski Patrol. Phil is also a published author with LinkedIn Learning. During the day, Phil works as an enterprise consultant and agile...
Coal for large to medium firms throughout the U.S. Phil enjoys to learn new technology and is always striving to improve his craft. Follow Phil on twitter via http://www.twitter.com/skimedic and read his blog at http://www.skimedic.com/blog. @skimedic

Aaron Kowall  
DevOps Architect, Microsoft

Rockford Lhotka  
CTO, Magenic

Rockford Lhotka is the CTO of Magenic, and the creator of the widely used CSLA .NET development framework. He is the author of numerous books on software development and regularly speaks at major conferences around the world. Rockford is a Microsoft Regional Director and MVP. His company Magenic (magenic.com) specializes in planning, designing, building, and maintaining an enterprise’s most mission critical systems. For more information, go to lhotka.net. @RockyLhotka

Leonard Lobel  
CTO, Sleek Technologies, Inc.

Leonard Lobel is the chief technology officer and co-founder of Sleek Technologies, a New York-based development shop with an early adopter philosophy toward new technologies. He is also a principal consultant at Tallan, a Microsoft National Systems Integrator and Gold Competency Partner. He is also a Microsoft MVP, Data Platform. Programming since 1979, Lenni specializes in Microsoft-based solutions, with experience that spans a variety of business domains, including publishing, financial, wholesale/retail, health care, and e-commerce. Lenni has served as chief architect and lead developer for various organizations, ranging from small shops to high-profile clients. He is also a consultant, trainer, and frequent speaker at local usergroup meetings, VSLive!, Live! 360, SQL PASS, and other industry conferences. Lenni has also authored several MS Press books and Pluralsight courses on SQL Server programming. @lennilobel

Ted Neward  
Director, Developer Relations, Smartsheet.com

Ted Neward is a programming language, virtual machine, and enterprise-scale architect. He has written a dozen books and hundreds of articles on .NET, Java, enterprise systems, mobile development, and programming languages. He resides in the Pacific Northwest, and can be found on the Internet at www.tedneward.com, www.itrellis.com, @tedneward on Twitter, and blogs.tedneward.com.

Oren Novotny  
Chief Architect, DevOps & Modern Software, BlueMetal

Oren is Chief Architect, DevOps & Modern Software at BlueMetal, a division of Insight, and a Microsoft Regional Director. He is passionate about reducing friction in the development process and creating modern software solutions to solve complex business challenges. Named a Microsoft MVP for Windows Platform Development in 2014, Microsoft MVP for Visual Studio and Development Technologies in 2016, Xamarin MVP in 2016, and member of the .NET Foundation Advisory Council in 2017, he has been writing code on the Microsoft platform since the days a 2400 baud modem was considered cutting-edge. His prior experience ranges from building identity solutions for global organizations, developing real-time trading systems dealing with massive amounts of data to the complex data models of equity derivatives and the regulatory needs of Medicaid claims processing. He believes that technology is meaningless in a vacuum and strives to show how the bleeding-edge delivers superior value to the clients’ bottom line. @onovotny

Peter Provost  
Principal PM Manager, Azure IoT Central, Microsoft

Peter Provost is a Principal PM Manager for Azure IoT Central, the industry’s first end-to-end hosted solution offering for building IoT applications. Prior to that, he worked as a manager and PM in the Azure Application Insights and Visual Studio teams. Before joining the Visual Studio team, he managed the patterns & practices development team at Microsoft where they created tooling and guidance for enterprise .NET customers. Before joining Microsoft, Peter was a software development consultant in the Rocky Mountain region focusing on Microsoft technologies and agile software development techniques. He has spoken at numerous conferences and user groups and has written articles on IoT, agile development, Visual Studio, ASP.NET, Web services and other topics.

Brian Randell  
Partner, MCW Technologies

Brian A. Randell is a partner with MCW Technologies, LLC. For more than 20 years, he has been building software solutions. He educates teams on Microsoft technologies via writing and training—both in-person and on demand. He’s also a consultant for worldwide companies of all sizes including Fortune 100 companies like Microsoft. Brian is a passionate software craftsman who still enjoys coding as he helps teams to improve their processes from idea to shipping to production management and monitoring. He’s currently a Visual Studio MVP and co-author of “Professional Application Lifecycle Management with Visual Studio 2013” from Wrox Publishing. When he’s not working, Brian enjoys spending time with his wife and two children. @brianrandell
Walt Ritscher  
**Senior Staff Instructor, LinkedIn Learning / Lynda**

Walt’s enthusiasm for crafting software interfaces blossomed early. Just a few days after discovering how to move pixels around a computer screen he was devouring books on the topic of computer graphics and UI design. Before long he was sharing his discoveries with other technology buffs, a lifelong pursuit that has led to teaching engagements at universities, private training companies and the international conference circuit. As a consultant, he has worked with a wide spectrum of clients, including Microsoft, HP, and Intel. He is now a staff author at Lynda.com, part of the LinkedIn family, where his content team produces technical training courses for software developers. @waltritscher

Paul Sheriff  
**Author / Instructor**

Paul has over thirty years of experience architecting information systems and his expertise is in much demand from Fortune 500 companies. Paul is a top-notch instructor, a pluralsight author, has published 200+ articles, and authored over 14 books on topics ranging from C#, SQL Server, and many .NET technologies. Paul speaks at many different conferences and user groups around the world.

Jen Underwood  
**Founder, Impact Analytix, LLC**

Jen Underwood, founder of Impact Analytix, LLC, is a recognized analytics industry expert. She has a unique blend of product management, design and over 20 years of “hands-on” development of data warehouses, reporting, visualization and advanced analytics solutions. In addition to keeping a constant pulse on industry trends, she enjoys digging into oceans of data. Jen is honored to be an IBM Analytics Insider, SAS contributor, former Tableau Zen Master, Top 10 Women Influencer and active analytics community member.

In the past, Jen has held worldwide product management roles at Microsoft and served as a technical lead for system implementation firms. She has launched new analytics products and turned around failed projects. Today she provides industry thought leadership, advisory, strategy, and market research. She has been mentioned by KD Nuggets, Information Management and Forbes. She writes for InformationWeek, O’Reilly Media, and numerous other tech industry publications.

Jen has a Bachelor of Business Administration – Marketing, Cum Laude from the University of Wisconsin, Milwaukee and a post-graduate certificate in Computer Science – Data Mining from the University of California, San Diego.

Catherine Wang  
**Senior Program Manager, Microsoft**

Catherine is a Senior Program Manager for the Visual Studio Azure Developer Experience team. She is currently focusing on the experience and technical design, and customer development for Azure diagnostics and Azure Storage Explorer. She has previously worked on Azure security and microservices tooling.

Jim Wooley  
**Solution Architect, Slalom Consulting**

Jim Wooley is a Solution Architect for Slalom Consulting. In his free time, Jim is a frequent speaker, MVP, and author of “LINQ in Action”. He is always striving to stay at the forefront of technology and enjoys the thrill of a new challenge. He has been active evangelizing LINQ since its announcement in 2005. In addition, he attempts to pass on the insights he has gained by being active in the community, including organizing and speaking at code camps and regional events, including MIX, Visual Studio Live!, CodeMash, KCDC, That Conference, DevWeek, and CodeStock. @Jimwooley

As a lead product manager for Azure Tools at Microsoft, I am responsible for the PM team that designs the developer experience for building and diagnosing cloud native applications for Azure. In my role I’m very passionate about helping developers succeed building high-scale distributed applications, and building a strong collaboration with customers so we’re in tune with their needs. We’re having fun learning and challenging the status quo in a breadth of technologies and languages, e.g. Linux, Windows, Java, .NET, Serverless, containers, service meshes, and application observability. @paulyuki99

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“I LIKED THE ATMOSPHERE - BOTH RELAXED AND EASY TO LEARN AND SEEK OUT NEW CONNECTIONS WITH PEERS.”

— Matt Ashe, Carter Healthcare, Inc.
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VENUE & TRAVEL

TRAVEL
The Hyatt Regency New Orleans is just over 12 miles from the Louis Armstrong Int’l Airport (Airport Code: MSY).

AVIS RENT-A-CAR is offering a discount on car rental for Visual Studio Live! New Orleans attendees. To receive the discounted rates, call Avis at 800.331.1600 and use the Avis Worldwide Discount (AWD) number D005872, or click here to make your reservation online.

DISCOUNTED AIRPORT SHUTTLE: Discounted shuttle service is available from the airport to hotels and various other locations in the New Orleans for $24 (per person, one-way) or $40 (per person, round-trip). You must book online at least 24 hours prior to your flight.

WEATHER AND DRESS
Dress for Visual Studio Live! New Orleans is casual. New Orleans enjoys moderate weather in April, with daytime temperatures that typically average between 60 degrees and 79 degrees Fahrenheit, which is some of the mildest weather you’ll find in the Big Easy. Temperatures inside the meeting rooms can vary greatly, so please plan your attire accordingly.

PARKING AT THE HYATT REGENCY NEW ORLEANS
For your convenience, Hyatt Regency New Orleans offers premium valet services. In addition to the hotel’s valet, there are also several nearby parking lots (fees apply), including the 1301 Girod Parking Garage that connects directly to the hotel. (Subject to Price Change and Special Events – Contact Merit Parking at 504.561.0575 for confirmed pricing).

Self-parking at the Hyatt Regency:
- 0-1 hour - $4
- 1-2 hours - $6
- 2-3 hours - $8
- 3-9 hours - $12
- 9-12 hours - $20
- 12-24 hours - $25

Valet parking at the Hyatt Regency:
- 0-1 hour - $10
- 1-2 Hours - $15
- 2-4 Hours - $22
- 4+ Hours - $30 + tax
- Overnight - $30 + tax
- Oversized Vehicles - $36 + tax /Overnight

LOCATION
Hyatt Regency New Orleans – Home to All Visual Studio Live! Sessions & Activities
Take advantage of the $189.00* room rate by April 1
*This $189 room rate is based on single or double occupancy. The room rate does not include applicable state, local and occupancy taxes.

HYATT REGENCY NEW ORLEANS
601 Loyola Avenue
New Orleans, LA 70113

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Take advantage of all the city of New Orleans has to offer. Visit the Official New Orleans Tourism site for information on places to visit and things to do in New Orleans.
CONFERENCE AND HOTEL PRICING PACKAGES

Visual Studio Live! offers several conference and hotel packages to best suit your needs and budget. Register now to save your seat and remember to book your hotel early too before it sells out!

CONFERENCE PACKAGES
Every Conference Package grants you access to every:

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<th>PACKAGES</th>
<th>SUPER EARLY BIRD Until Feb. 22</th>
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ADD THE HOTEL PACKAGE

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TEAM DISCOUNTS: BRING THE TEAM AND SAVE BIG!
Visual Studio Live! New Orleans offers savings to teams of 3 or more from the same company and registering for the same package. Looking to bring 10 or more? Contact our Conference Registrar Claire Segerson at csegerson@converge360.com or at 949.296.9840.

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NEW – ADD THE VSLIVE! CONFERENCE ON-DEMAND PACKAGE* AND EXTEND YOUR LEARNING
New to Visual Studio Live! in 2019, you can now extend your learning with on-demand access to all of the recorded content from the VSLive! New Orleans sessions (does not include workshops or hands-on labs) taking place Tuesday, April 23 – Thursday, April 25. The VSLive! On-Demand Content Package gives you access to all sessions, keynotes and panel discussions shortly after the conference ends for one full year.

*Workshops and Hands-on Lab Recordings are not included with the On-Demand Package

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