

Visual Studio[®] LIVE!

EXPERT SOLUTIONS FOR .NET DEVELOPERS

March 11 – 16, 2018
Bally's Hotel & Casino
Las Vegas



Respect the Past. Code the Future.



VSLive! 1998



VSLive! 2017

vslive.com/lasvegas

TRACK TOPICS:



ALM / DevOps



Cloud Computing



Database and Analytics



Native Client



Software Practices



Visual Studio / .NET Framework



Web Client



Web Server



Hands-On Labs

BACK BY POPULAR DEMAND

SUPPORTED BY



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STAY CONNECTED TO VISUAL STUDIO LIVE! ON OUR SOCIAL NETWORKS



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A MESSAGE FROM THE CONFERENCE CO-CHAIRS

IT'S SOMETHING AMAZING TO BE WRITING THIS WELCOME LETTER IN THE FALL OF 2017.

2018 will be the 25th year for Visual Studio Live!, a show that started with a focus on classic Visual Basic on the desktop that now covers a wide range of languages including, but far from limited to, C#, Visual Basic .NET, F#, Python, SQL on platforms from Apple, Google, and Microsoft (to name a few), in your hand, on your desk, on-premises in your data center and in the cloud.

We're Andrew Brust, Rockford Lhotka, and Brian Randell, and as Conference Co-Chairs for Visual Studio Live! Las Vegas, we'd like to personally invite you to join us this March at Bally's in Las Vegas, NV. 2018 promises to be an awesome year for new technology mixed with tried and true knowhow. 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 a high level of value.

Visual Studio Live! in Las Vegas gives you more of what you've asked for: full-day hands-on labs, 75-minute breakout sessions, 20-minute lightning talks, and full-day pre-and post-conference workshops covering an wide array of development technology for everyone. From security, to databases, to the latest Web technologies, we've got you covered. Our

speakers cover AI, mixed reality, bots, and enterprise software solutions in-depth, with experience on Windows, macOS, and Linux. Our team has picked every workshop 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 Microsoft Visual Studio 2017, the full .NET Framework and .NET Core, WPF, and UWP.
- If the Web is more your style, you'll find coverage of JavaScript, TypeScript, Angular, WebAssembly on the client as well as ASP.NET and ASP.NET Core on the server.
- Feeling confused on .NET? We've got sessions to clear it up.
- Want to improve the quality of your software? We've got sessions on unit testing, writing testable code, and how to version your packages.
- Mystified as to how you can bring DevOps to your organization? Our speakers will answer your questions with practical guidance on mobile development, Web, database and more.

Our workshop content provides coverage of Cross-Platform Distributed Application Architecture, SQL Server, UX design, mixed reality, AI, Bots, and DevOps. We've even got two full-day hands-on labs on Angular 2 and mobile development with Xamarin, and a special two-day security hands-on lab. Our sessions, workshops,

and hand-on labs drill deep into the subjects you need to master and the fundamentals that are always important.

Microsoft continues the march toward the future. To keep up, you need to rapidly absorb 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! Las Vegas and get the tools to help yourself grow.

Come celebrate 25 years of great learning 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



#VSLive25 1993 - 2018:
Thank YOU
for being a part
of our success



TEN REASONS TO ATTEND Visual Studio Live! Las Vegas

10 **BACK BY POPULAR DEMAND: HANDS-ON LEARNING. AGAIN** at VSLive! this year, there's another full day of learning with the Sunday **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 6 full days of educational sessions on hot topics like VS 2017, ASP.NET Core, AngularJS, ALM, Entity Framework, SQL Server, and more!

8 **RESPECT THE PAST; CODE THE FUTURE.** 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. The 2018 version promises tons of new enhancements and features to make Visual Studio better, not to mention Microsoft's continued investment into open source and cross-platform development.

3 **IT'S STILL VEGAS, BABY!** Code by day and enjoy all the Strip has to offer at our headquarters, Bally's Hotel & Casino.



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 **25 YEARS OF CODING INNOVATION!** For over 25 years, Visual Studio Live! has been THE trusted resource for .NET developer-focused education! We are proud to have served tens of thousands, giving them the training and education they've needed since 1993.

THE FUN STUFF: VISUAL STUDIO LIVE! LAS VEGAS EVENTS

YOUR ATTENDANCE AT VISUAL STUDIO LIVE! LAS VEGAS is about learning from your peers as well as the experts; make the most of your time with us and add these events to your itinerary!

DINE-A-ROUND DINNER Monday, March 12

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 or around Bally's Hotel & Casino. 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 dinner and drinks.

WELCOME RECEPTION Tuesday, March 13

All conference attendees are invited to celebrate the start of Visual Studio Live! Las Vegas 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, March 14

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.

We will also have designated speaker tables— noted with the speaker's name. Join your favorite speaker for a lunchtime discussion or just to ask questions or clarify anything from their sessions.

“THE FOOD IS TOP NOTCH! THE SPEAKERS WERE FRIENDLY AND KNOWLEDGEABLE. IT WAS AWESOME TO HAVE A RAFFLE AND OPEN BAR; ALLOWED ME TO DISCUSS RECOMMENDATIONS TO OTHER DEVELOPERS AND SOCIALIZE.”

– David Jenkins, Fire Mountain Gems



Dine-A-Round Dinner



Welcome Reception



Birds of a Feather Lunch

VSLIVE! HIGH ROLLER EVENING OUT
Wednesday, March 14, 7:00 – 8:30pm

Everyone wants to be a high roller in Vegas, right? This special event gives you that opportunity, courtesy of Visual Studio Live! Join us Wednesday evening at the base of the amazing High Roller, one of the world's tallest observation wheels! Located just across the street from Bally's, enjoy complimentary cocktails, dessert, and a live DJ, plus it's the perfect time to ride the High Roller. This is an experience you won't want to miss!

All Visual Studio Live! Las Vegas attendees will receive a complimentary ticket to ride the High Roller!

About the High Roller Observation Wheel
Redefining the iconic Las Vegas skyline, the High Roller is one of the world's tallest observation wheels. Topping out at 550 feet and measuring 520 feet in diameter, the High Roller eclipses both the London Eye and Singapore Flyer. Facing north and south (parallel to Las Vegas Boulevard), the wheel features 28 glass-enclosed cabins that unveil broad views of the famed-resort city in the 30 minutes it takes to complete one full revolution.



AGENDA AT-A-GLANCE

ALM / DevOps		Cloud Computing	Database and Analytics	Native Client	Software Practices	Visual Studio / .NET Framework	Web Client	Web Server
Full Day Hands-On Labs: Sunday, March 11, 2018 <small>(Separate entry fee required)</small>								
8:00 AM	9:00 AM	Pre-Conference Hands-On Lab Registration - Coffee and Morning Pastries						
9:00 AM	6:00 PM	HOL01 Full Day Hands-On Lab: Modern Security Architecture for ASP.NET Core (Part 1) <i>- Brock Allen</i>		HOL02 Full Day Hands-On Lab: From 0-60 in a Day with Xamarin and Xamarin.Forms <i>- Roy Cornelissen & Marcel de Vries</i>		HOL03 Full Day Hands-On Lab: Busy Developer's HOL on Angular - <i>Ted Neward</i>		
4:00 PM	6:00 PM	Conference Registration Open						
Pre-Conference Workshops: Monday, March 12, 2018 <small>(Separate entry fee required)</small>								
7:30 AM	9:00 AM	Pre-Conference Workshop Registration - Coffee and Morning Pastries						
9:00 AM	6:00 PM	HOL01 Full Day Hands-On Lab: Modern Security Architecture for ASP.NET Core (Part 2) <i>- Brock Allen</i>		M02 Workshop: Developer Dive into SQL Server 2016 <i>- Leonard Lobel</i>		M03 Workshop: Add Intelligence to Your Solutions with AI, Bots, and More - <i>Brian Randell</i>		
7:00 PM	9:00 PM	Dine-A-Round						
Day 1: Tuesday, March 13, 2018								
7:00 AM	8:00 AM	Registration - Coffee and Morning Pastries						
8:00 AM	9:15 AM	T01 Go Serverless with Azure Functions <i>- Eric D. Boyd</i>	T02 Getting Ready to Write Mobile Applications with Xamarin - <i>Kevin Ford</i>	T03 Database Development with SQL Server Data Tools <i>- Leonard Lobel</i>	T04 What's New in Visual Studio 2017 for C# Developers <i>- Kasey Uhlenhuth</i>			
9:30 AM	10:45 AM	T05 Angular 101 - <i>Deborah Kurata</i>	T06 Lessons Learned from Real World Xamarin.Forms Projects - <i>Nick Landry</i>	T07 Introduction to Azure Cosmos DB <i>- Leonard Lobel</i>	T08 Using Visual Studio Mobile Center to Accelerate Mobile Development <i>- Kevin Ford</i>			
11:00 AM	12:00 PM	KEYNOTE: .NET Everywhere and for Everyone <i>- James Montemagno, Principal Program Manager, Xamarin, Microsoft</i>						
12:00 PM	1:00 PM	Lunch						
1:00 PM	1:30 PM	Dessert Break - Visit Exhibitors						
1:30 PM	2:45 PM	T09 Busy Developer's Guide to Chrome Development - <i>Ted Neward</i>	T10 Works On My Machine... Docker for Developers <i>- Chris Klug</i>	T11 DevOps for the SQL Server Database <i>- Brian Randell</i>		T12 To Be Announced		
3:00 PM	4:15 PM	T13 Angular Component Communication <i>- Deborah Kurata</i>	T14 Customizing Your UI for Mobile Devices: Techniques to Create a Great User Experience <i>- Laurent Bugnion</i>	T15 PowerShell for Developers <i>- Brian Randell</i>		T16 To Be Announced		
4:15 PM	5:30 PM	Welcome Reception						

Sessions and speakers subject to change.

Continued next page

AGENDA AT-A-GLANCE (continued)

		ALM / DevOps	Cloud Computing	Database and Analytics	Native Client	Software Practices	Visual Studio / .NET Framework	Web Client	Web Server
Day 2: Wednesday, March 14, 2018									
7:30 AM	8:00 AM	Registration - Coffee and Morning Pastries							
8:00 AM	9:15 AM	W01 The Whirlwind Tour of Authentication and Authorization with ASP.NET Core - Chris Klug		W02 Building Mixed Reality Experiences for HoloLens & Immersive Headsets in Unity - Nick Landry		W03 Using Feature Toggles to Separate Releases from Deployments - Marcel de Vries		W04 Lock the Doors, Secure the Valuables, and Set the Alarm - Eric D. Boyd	
9:30 AM	10:45 AM	W05 TypeScript: The Future of Front End Web Development - Ben Hoelting		W06 A Dozen Ways to Mess Up Your Transition From Windows Forms to XAML - Billy Hollis		W07 Overcoming the Challenges of Mobile Development in the Enterprise - Roy Cornelissen		W08 Computer, Make It So! - Veronika Kolesnikova & Willy Ci	
11:00 AM	12:00 PM	GENERAL SESSION: The Act of Creation—How Dev Tooling Makes Successful Developers - Kasey Uhlenhuth, Program Manager, .NET & Visual Studio, Microsoft							
12:00 PM	1:00 PM	Birds-of-a-Feather Lunch							
1:00 PM	1:30 PM	Dessert Break - Visit Exhibitors - Exhibitor Raffle @ 1:15pm (Must be present to win)							
1:30 PM	1:50 PM	W09 Fast Focus: 0-60 for Small Projects in Visual Studio Team Services - Alex Mullans		W10 Fast Focus: Cross Platform Device Testing with xUnit - Oren Novotny		W11 Fast Focus: Understanding .NET Standard - Jason Bock			
2:00 PM	2:20 PM	W12 Fast Focus: HTTP/2: What You Need to Know - Robert Boedigheimer		W13 Fast Focus: Serverless Computing: Azure Functions and Xamarin in 20 minutes - Laurent Bugnion		W14 Fast Focus: Why You Should Love SQL Server 2017 - Scott Klein			
2:30 PM	3:45 PM	W15 Advanced Fiddler Techniques - Robert Boedigheimer		W16 Building Cross-Platforms Business Apps with C# and CSLA .NET - Rockford Lhotka		W17 Versioning NuGet and npm Packages - Alex Mullans		W18 Getting to the Core of .NET Core - Adam Tuliper	
4:00 PM	5:15 PM	W19 Assembling the Web - A Tour of WebAssembly - Jason Bock		W20 Radically Advanced XAML: Dashboards, Timelines, Animation, and More - Billy Hollis		W21 Encrypting the Web - Robert Boedigheimer		W22 Porting MVVM Light to .NET Standard: Lessons Learned - Laurent Bugnion	
7:00 PM	8:30 PM	VSLive's High Roller Evening Out							

Sessions and speakers subject to change.

“GREAT SESSIONS AND LOCATION, WITH HIGH QUALITY SPEAKERS. THE NETWORKING EVENTS WERE GREAT TOO.”

– Rebekah Grochowsky, Wachter, Inc.

Continued next page

AGENDA AT-A-GLANCE (continued)

		ALM / DevOps	Cloud Computing	Database and Analytics	Native Client	Software Practices	Visual Studio / .NET Framework	Web Client	Web Server	
Day 3: Thursday, March 15, 2018										
7:30 AM	8:00 AM	Registration - Coffee and Morning Pastries								
8:00 AM	9:15 AM	TH01 ASP.NET Core 2 For Mere Mortals - Philip Japikse		TH02 Performance in 60 Seconds – SQL Tricks Everybody MUST Know - Pinal Dave		TH03 Demystifying Microservice Architecture - Miguel Castro		TH04 Cognitive Services in Xamarin Applications - Veronika Kolesnikova		
9:30 AM	10:45 AM	TH05 Getting to the Core of ASP.NET Core Security - Adam Tuliper		TH06 Secrets of SQL Server - Database Worst Practices - Pinal Dave		TH07 Unit Testing Makes Me Faster: Convincing Your Boss, Your Co-Workers, and Yourself - Jeremy Clark		TH08 Publish Your Angular App to Azure App Services - Brian Noyes		
11:00 AM	12:00 PM	PANEL: Security in Modern App Development <i>Rockford Lhotka (moderator), Damian Brady, Pinal Dave, Veronika Kolesnikova, James McCaffrey, and Oren Novotny</i>								
12:00 PM	1:00 PM	Lunch								
1:00 PM	2:15 PM	TH09 Entity Framework Core 2 For Mere Mortals - Philip Japikse		TH10 SQL Server 2017 – Intelligence Built-in - Scott Klein		TH11 Writing Testable Code and Resolving Dependencies – DI Kills Two Birds with One Stone - Miguel Castro		TH12 Signing Your Code the Easy Way - Oren Novotny		
2:30 PM	3:45 PM	TH13 MVVM and ASP.NET Core Razor Pages - Ben Hoelting		TH14 Introduction to Azure Machine Learning - James McCaffrey		TH15 "Doing DevOps" as a Politically Powerless Developer - Damian Brady		TH16 Analyzing Code in .NET - Jason Bock		
4:00 PM	5:15 PM	TH17 Securing Web Apps and APIs with IdentityServer - Brian Noyes		TH18 Introduction to the CNTK v2 Machine Learning Library - James McCaffrey		TH19 I'll Get Back to You: Task, Await, and Asynchronous Methods - Jeremy Clark		TH20 Multi-targeting the World: A Single Project to Rule Them All - Oren Novotny		
Post-Conference Workshops: Friday, March 16, 2018 <small>(Separate entry fee required)</small>										
7:30 AM	8:00 AM	Post-Conference Workshop Registration - Coffee and Morning Pastries								
8:00 AM	5:00 PM	F01 Workshop: Creating Mixed Reality Experiences for HoloLens & Immersive Headsets with Unity - Nick Landry & Adam Tuliper			F02 Workshop: Distributed Cross-Platform Application Architecture - Jason Bock & Rockford Lhotka			F03 Workshop: UX Design for Developers: Basics of Principles and Process - Billy Hollis		

Sessions and speakers subject to change.

“GREAT CONTENT; LEARNED LOTS OF NEW STUFF. GOT ANSWERS TO MY ARCHITECTURE QUESTIONS, WAS ABLE TO BOUNCE IDEAS AROUND ABOUT TECHNOLOGY; AND WAS ABLE TO HELP OTHERS.”

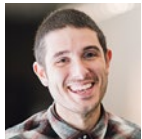
– Fernando Dominguez

KEYNOTE / GENERAL SESSION

Want a front-row seat to the future of technology? Attend the keynote address and general session for Visual Studio Live! Las Vegas to learn what's hot on today's tech landscape and what exciting developments lie ahead for this year and beyond.

Tuesday, March 13, 11:00AM – 12:00PM

KEYNOTE: .NET Everywhere and for Everyone



James Montemagno
Principal Program Manager – Xamarin,
Microsoft

In this mobile first, cloud first world, it's essential to have a high-performing, powerful framework available on every platform you're targeting. That framework is .NET and has expanded to every device imaginable. Whether it is server, web, mobile, wearables, or IoT, .NET is there and fully cross-platform. Developers can now leverage Xamarin to craft native Mobile and Desktop applications from a single shared code base, while building back-ends and web sites in .NET Core and ASP.NET Core that can run on any operating system to power them. Join James Montemagno in a keynote session focused on how you can leverage your existing .NET and C# skills to build apps for any platform. He'll take you through everything you need to get started building apps and a few revolutionary tools to help learn the amazing APIs packed into each platform.

Wednesday, March 14, 11:00AM – 12:00PM

GENERAL SESSION: The Act of Creation—How Dev Tooling Makes Successful Developers



Kasey Uhlenhuth
Program Manager, .NET & Visual Studio,
Microsoft



Thursday, March 15, 11:00AM – 12:00PM

PANEL: Security in Modern App Development



Rockford Lhotka
(moderator)



Damian Brady



Pinal Dave



Veronika Kolesnikova



James McCaffrey



Oren Novotny

HANDS-ON LABS

Visual Studio Live! Las Vegas offers three instructor-led, pre-conference Hands-On Labs. Get intensive in-depth training to complete your conference experience.

All three labs are Bring Your Own Laptop (BYOL). Attendance for each Hands-On Lab is limited, so be sure to sign up early for these special pre-conference HOLs.

Additional Fee Required. See [Pricing Page](#) for Details.

“THE OVERALL LEARNING EXPERIENCE IS GREAT. IT WAS GREAT LEARNING ABOUT TECHNOLOGIES NOT OFFICIALLY RELEASED YET; AND I FEEL LIKE I GET TO BE THE ONE TO HELP INTRODUCE THESE THINGS AT MY COMPANY.”

– Lee Wisdom, CSI

HOL01 2-Day Hands-On Lab: Modern Security Architecture for ASP.NET Core (Part 1)*

Intermediate

Sunday, March 11, 9:00am – 6:00pm
BROCK ALLEN

HOL01 2-Day Hands-On Lab: Modern Security Architecture for ASP.NET Core (Part 2)*

Intermediate

Monday, March 12, 9:00am – 6:00pm
BROCK ALLEN

ASP.NET Core brings many modern approaches to building web applications. Given its importance, updates to the security architecture are also included in this modern framework. This two-day Hands-On Lab will bring you up to speed on the main components in ASP.NET Core for securing your web applications and web APIs. This includes authenticating users with middleware, implementing policy-based authorization, and proper security architecture with protocols such as OpenId Connect and OAuth2. You'll also see how to use OpenID Connect and

OAuth2 to secure browser-based JavaScript applications and native/mobile applications. As part of your exploration into OpenID Connect and OAuth2, you'll use the popular open source framework IdentityServer. Come and learn how ASP.NET Core and IdentityServer can be used to design for a modern security architecture.

You will learn:

- About the security architecture of ASP.NET Core
- About authenticating users with OpenID Connect
- How to protect Web APIs with OAuth2
- Attendance is limited.

Attendee Requirements:

You must provide your own laptop computer for this hands-on lab.

Make sure you have Visual Studio 2017 (or equivalent editor) and .NET Core 2 SDK installed on your laptop before the conference.

*HOL01 is a two-day Hands-On Lab and is only available for attendees that purchase a Sunday pass. To attend this lab, attendees must register for the six-day conference package, OR register for a Monday Workshop Pass and add the Sunday Hands-On Lab. A "Monday Only" pass for this two-day Hands-On Lab is not available. For questions, please contact conference registration at csegeron@1105media.com



HANDS-ON LABS (continued)

HOL02 Full Day Hands-On Lab: From 0-60 in a Day with Xamarin and Xamarin.Forms

Introductory / Intermediate

ROY CORNELISSEN & MARCEL DE VRIES

Sunday, March 11, 9:00am – 6:00pm

Becoming a multi-platform mobile developer using just .NET seemed like a dream until recently. When Microsoft acquired Xamarin, it opened a whole new world of native mobile app development with the beloved .NET framework. But building high quality apps on iOS, Android and Windows UWP isn't just that easy and may seem daunting. This workshop will guide you on your journey into mobile.

In this full day hands-on lab, you'll walk through the process of building one app for many platforms. You'll learn how to reuse as much code as possible, while keeping the uniqueness of each platform to appeal to the native users. You'll also learn the details of each platform,

the app concepts of each platform, because building quality apps requires understanding the platforms for which you're building. You'll learn how you can architect your app in such a way to share code amongst these platforms and help you get much better ROI 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 codebase
- How to think "mobile first" in your application architecture
- Attendance is limited.

Attendee Requirements:

You must provide your own laptop computer for this hands-on lab.

Either an Apple macOS laptop or Windows PC laptop running Windows 10 will work fine. Make sure you have Visual Studio for Mac (macOS) or Visual Studio 2017

(Windows) installed, including the tools for Xamarin mobile development. A quick overview can be found in the following video or blogpost.

Any edition of Visual Studio will do.

Please make sure to download Xamarin and the platform SDK's (Android, iOS, Windows) before the conference, as these downloads take up a lot of bandwidth.

HOL03 Full Day Hands-On Lab: Busy Developer's HOL on Angular

Intermediate

TED NEWARD

Sunday, March 11, 9:00am – 6:00pm

In the world of the Single-Page Application (SPA), one name that appears over and over is AngularJS, a JavaScript web framework that does things a little differently—and with great effect. But getting started with AngularJS is a higher bar than some other JavaScript frameworks, because if you don't do things the "Angular Way," it gets really tricky really quickly. In this Hands-On Lab, you'll start from zero, with a little TypeScript, then start working with Angular 2: its core constructs and how it works with components, modules, and of course the ubiquitous model/view/controller approach. Bring your laptop, a buddy, and a caffeinated beverage of your choice, because once you strap in, it's going to be an exciting hands-on, lecture/lab ride.

Attendance is limited.

Attendee Requirements:

You must provide your own laptop computer for this hands-on lab.

Any development laptop with NodeJS v5.x.x (or greater) and npm v3.x.x (or greater) installed before arriving. (Check the versions by opening a command-line terminal and typing "node -v" and "npm -v".) VisualStudio Code is recommended, but not required.



“THE BREADTH OF SUBJECT AREA; THERE WAS SOMETHING IN EVERY TIMES LOT TO ENGAGE AND EDUCATE; WHETHER OR NOT IT WAS DIRECTLY USEFUL TO MY CURRENT WORK. ALSO, THE WORKSHOP WAS A STANDOUT AND TOTALLY RELEVANT TO WHAT I AM DOING RIGHT NOW.”

– Sean Brennan, Delco Automation

WORKSHOPS

Choose from a range of content and topics by expert presenters with Visual Studio Live! Las Vegas' Pre-Conference and Post-Conference workshops.

Topics covered include:

- Bots, AI and ASP.NET DevOps with using VSTS/TFS
- Developer deep dive on SQL Server 2016
- Distributed Computing
- Mixed Reality and Augmented Reality
- UX Design

M02 Workshop: Developer Dive into SQL Server 2016

Intermediate

LEONARD LOBEL

Monday, March 12, 9:00am – 6:00pm

This full-day workshop will get you up to speed on powerful features for developers in SQL Server. Lenni pulls no punches as he rips through the most important SQL



Server programmability points in this intensive demo-packed tour, including the latest capabilities introduced with SQL Server 2016.

Part 1—T-SQL Enhancements: You'll start with the many enhancements made to T-SQL; and learn about the T-SQL windowing (OVER clause) enhancements, running and sliding aggregates, 22 new functions, the THROW statement, server-side paging, the SEQUENCE object, metadata discovery techniques, and DIE (drop if exists).

Part 2—What's New in SQL Server 2016: Next, you'll explore many of the latest SQL Server features introduced in SQL Server 2016. Discover new security features such as dynamic data masking, row-level security, and always encrypted. Other innovative capabilities include "stretch" database (allow select tables in an on-premises database to be transparently relocated in Azure SQL Database), temporal data (enable "time travel" to access data as it existed at any point in time), and integrated JSON support.

Part 3—Beyond Relational: Then you'll examine the powerful "beyond relational" features, and get you thinking outside the box with respect to the types of data that can be managed by a relational database system. Learn about the new built-in JSON support in SQL Server 2016. Dig into FILESTREAM and FileTable to discover how you can enjoy the native ability to store large binary objects in the file system. We'll also cover the geospatial data types that enable you to integrate location-intelligence into the database, and build several location-aware applications on top of these new data types, including a Bing Maps mash-up.

You will learn:

- About T-SQL enhancements including windowing, new functions, THROW, server-side paging, SEQUENCE, and DIE
- The new developer features in SQL Server 2016, including DDM, RLS, Always Encrypted, Stretch, and Temporal
- The beyond relational features in SQL Server, including JSON (new in 2016), FILESTREAM, FileTable, and geospatial data types.

M03 Workshop: Add Intelligence to Your Solutions with AI, Bots, and More

Intermediate

BRIAN RANDELL

Monday, March 12, 9:00am – 6:00pm

Building the future today means adding intelligence to your apps. In the modern world, that means taking advantage of the cloud and the huge power it can provide. In this workshop, Brian will show you how to put a UI on artificial intelligence by teaching you how to build multi-channel bots using the Microsoft Bot Framework and Cognitive Services. You can easily integrate bots built with the Microsoft Bot Framework with multiple channels like a web site, Skype, Slack, Facebook, and even Cortana.

By adding Cognitive Services to your apps, you can add powerful algorithms to see, hear, speak, understand, and interpret our needs using natural methods of communication with just a few lines of code. You'll learn about the various services and how you use the smarts behind them to make your apps even better. The Language Understanding Intelligent Service (LUIS) in particular lets you add conversational intelligence to give your bot a natural flow.

You can build all this on top of ASP.NET, or node.js if you're so inclined. We'll focus on ASP.NET and C# in the workshop though. In addition, like all apps, you'll want to wrap your app in a solid DevOps practice so you'll see how you can host your code in Visual Studio Team Services, have full traceability with work item tracking, use Team Build for quality with unit tests, and use the Release Management tools to control updates to your bot via a full CI/CI pipeline. By the end of the day, you'll have all the code and notes to add intelligence to your solutions.

You will learn:

- All about bots and why you want to use them
- How to let the cloud do the heavy lifting on your bot's brains
- How to put a good DevOps process around your bot development

WORKSHOPS (continued)

F01 Hands-on Workshop: Creating Mixed Reality Experiences for HoloLens & Immersive Headsets with Unity

Introductory / Intermediate

NICK LANDRY & ADAM TULIPER

Friday, March 16, 8:00 – 5:00pm

Mixed Reality blends 3D holographic content into your physical world, giving your holograms real-world context and scale, letting you interact with both digital content and the world around you. This workshop is your introduction to building 3D Mixed Reality applications and games for Microsoft HoloLens and Immersive headsets using C#, Visual Studio and Unity. Microsoft HoloLens is the world's first self-contained, untethered head-mounted holographic computing device for Mixed Reality (MR). You'll explore the world of Windows Mixed Reality with immersive and holographic headsets, learn what is the HoloLens, what makes it unique, and what are its capabilities. You'll also look at how to work with the main forms of input in Mixed Reality: Gaze, Gesture, Voice and Controllers. One of the most fascinating features is spatial mapping, which is how the HoloLens and other headsets understand the space around the user. You'll learn how to work with the spatial data to integrate 3D holograms with the real world and how to create safe boundaries for immersive headset users. Next, you'll dive into the development workflow, from building Mixed Reality applications with Unity, easily integrating into the Windows Mixed Reality API, leveraging the Mixed Reality Toolkit (MRTK) for Unity, and deploying and testing applications to the HoloLens emulator, a HoloLens physical device or an immersive Mixed Reality headset.

Since Unity is the primary tool used to build Mixed Reality applications, this workshop also includes an introduction to Unity for developers. Unity is the premier advanced platform for developing stunning 2D and 3D applications for all major platforms. Microsoft and Unity have partnered to provide first class support in the Unity platform for

Windows 10 for free to developers, rounding out support for every major platform. This workshop takes you through understanding the essential concepts in Unity, such as textures, meshes, normals, vectors, shaders, and more. You'll also work through the basics of Unity, the UI, assets, code, ways to develop, and some simple but powerful techniques to get up and running fast with Unity and start creating experiences you didn't think were possible. You will then write code and use tools to create Windows Mixed Reality apps that run on the HoloLens and immersive headsets.

This is a hands-on workshop. Please bring your Windows 10 computer with the following installed. Follow the latest instructions posted at https://developer.microsoft.com/en-us/windows/mixed-reality/install_the_tools.

You will learn:

- Core concepts of Unity development
- Overview of Windows Mixed Reality, HoloLens and immersive headsets
- Overview of the Universal Windows Platform (UWP)
- Building 3D apps for Windows Mixed Reality in Unity with C#
- Interacting with holograms using gaze, gestures, voice and controllers
- Using the Mixed Reality Toolkit (MRTK) for Unity to accelerate development
- Deploying Windows Mixed Reality apps to the emulators or actual hardware

F02 Workshop: Distributed Cross-Platform Application Architecture

Intermediate

JASON BOCK & ROCKFORD LHOTKA

Friday, March 16, 8:00am – 5:00pm

When it comes to software architecture and development, distributed computing is both a pressing development concern and age-old concept. It can still be confusing and intimidating to work with systems that span multiple

machines and platforms, especially with the myriad cloud-based and on-premises technologies available today. You have numerous resources at your disposal to make your distributed systems scalable, reliable, and maintainable. This workshop will cover the fundamentals of distributed computing, along with tools and frameworks you can use to build and deploy your application. You'll learn how to apply technologies such as Azure Functions, Azure Service Fabric, Signal-R, RESTful services, and so on.

F03 Workshop: UX Design for Developers: Basics of Principles and Process

Introductory

BILLY HOLLIS

Friday, March 16, 8:00 – 5:00pm

If you create screens in your application without detailed wireframes, then you are doing UX design. Why not do it better? This full-day session will teach you two dozen fundamental principles of design, based on science of the visual system and human psychology. Then you'll see a lightweight process for understanding needs, observing users, and sketching to produce compelling, innovative experiences. The day is exercise-heavy. Come prepared to do hands-on, creative work. Many attendees have said this workshop changed their whole approach to software development.

You will learn:

- The principles of design through experience, taking tests to understand how your own mind and visual system work
- A variety of bad user experiences, and learn how to pinpoint the principles behind its flaws
- A basic process for proceeding through UX design, starting with problem definition, and proceeding through user observation and design via sketching, wireframing, and prototyping

SESSION DESCRIPTIONS

ALM / DEVOPS



DevOps is no longer a buzzword. Getting it right requires commitment from your organization and from you to continuously improve how you deliver solutions. And you're at Visual Studio Live! looking to do just that—improve. You'll need to learn how to improve your processes and get the mechanics of automation down. You need to get people, process, and product working in harmony. In this track, we've got a range of sessions to help you build software that provides value to your customers with greater quality delivered continuously as your users require.

You'll find coverage of:

- DevOps and relational databases
- Automation using PowerShell
- Package management for NuGet and NPM
- Cloud based tooling for small projects
- Deep .NET debugging

T11 DevOps for the SQL Server Database

Intermediate

BRIAN RANDELL

Tuesday, March 13, 1:30 - 2:45pm

DevOps is hot, but the database is often the missing link. How do you manage the necessary changes needed to support your applications? How do you track these changes and follow a change from development to test to production? You need an effective database lifecycle management plan.

In this session, you'll learn where the SQL Server database fits in to DevOps, and how you can use tools to extend your infrastructure to make the database a first-class citizen, just like your source code. You'll see how to track changes with version control; create update packages; and deploy to multiple environments with complete automation like development, test, UAT, and production. You'll bring things under control with Database Lifecycle Management. You'll learn the process as well as see examples using the Visual Studio SQL Server Database Tools, Team Foundation Server Team Build, Release Management, and custom tools from Redgate.

You will learn:

- Why you need DevOps for your database
- How to define a good Database Lifecycle Management (DLM) process
- How to use Microsoft and Redgate tools to implement the DLM process

T15 PowerShell for Developers

Introductory

BRIAN RANDELL

Tuesday, March 13, 3:00 - 4:15pm

PowerShell is the lingua franca of DevOps on Windows, Azure, and now MacOS and Linux if you choose. Automated configuration and management is the key to success in the modern enterprise— whether on-premises, in the cloud, or in a hybrid environment. Whether you're a native programmer using C++, a managed developer using .NET, or even someone who's already embraced scripting, PowerShell is an invaluable tool in your DevOps toolbox. This session will work from the ground up to using advanced features, including Interop, Desired State Configuration, and custom TFS/VSTS tasks.

You will learn:

- How to configure your PowerShell environment
- How to use PowerShell quickly and efficiently
- About any PowerShell "gotchas"

W09 Fast Focus: o-60 for Small Projects in Visual Studio Team Services

Introductory

ALEX MULLANS

Wednesday, March 14, 1:30 – 1:50pm

Visual Studio Team Services (VSTS) isn't just for enterprises and large teams. You can help your small project team efficiently plan their work, manage their source code, and even deploy to production with continuous integration and delivery. This session will show you how to set up a new web site hosted in an Azure App Service, get it checked into and deployed with VSTS, and set up a backlog to track the team's work.

You will learn:

- About the scope of capabilities provided in Visual Studio Team Services free for small teams
- How to quickly add VSTS to a small project without a lot of management overhead
- How VSTS and Azure work together to let you spend more time writing code and less time managing infrastructure

W17 Versioning NuGet and npm Packages

Intermediate

ALEX MULLANS

Wednesday, March 14, 2:30 – 3:45pm

Versioning is the hidden underbelly of packaging. It always works, right up until it doesn't. This session will cover common ways to apply Semantic Versioning to your NuGet and npm packages. It will also cover using SemVer in combination with Team Build and Release Views in Visual Studio Team Services.

You will learn:

- About Semantic Versioning and why it's important for packages shared across teams or with customers
- How to apply common SemVer practices to your NuGet packages, both on a developer machine and within a continuous integration environment

SESSION DESCRIPTIONS BY TRACK (continued)

- How release views in Visual Studio Team Services can help communicate the quality of your packages throughout the whole package lifecycle

TH15 "Doing DevOps" as a Politically Powerless Developer

Introductory

DAMIAN BRADY

Thursday, March 15, 2:30 - 3:45pm

DevOps. So hot right now. So hot your managers have jumped on the buzzword bandwagon and have told you to "make it happen", but also not to subvert the company change process. You can do that, right?

As tech professionals, we know you can't just exchange cash for DevOps, but how can you convince the higher-ups? Particularly when upper management won't let go of the perceived safety of a slow-moving product delivery cycle.

This talk looks at the realities of implementing DevOps in an organization that is resistant to change. We'll discuss the levels of technical and cultural change that you absolutely need, the barriers that commonly get in the way, and some techniques to get around them. Expect subtle and possibly even underhanded tips to get things moving in an environment that just wants to use the word "DevOps" without making the necessary changes.

"VSLIVE! IS A GREAT INTRODUCTION TO NEWEST TECHNOLOGIES/Frameworks, PLUS YOU GET TO LEARN WHAT IS ON THE MINDS OF MICROSOFT IN GENERAL. YOU GET TO MEET LIKE-MINDED PEOPLE AND GAIN INSIGHT INTO HOW OTHER DEVELOPERS WORK. AND, SEE VEGAS!

– Mark Bulleit, BulleIT Systems

CLOUD COMPUTING



Most IT practitioners agree—the future of application development is service-based and in the cloud. Cloud computing offers flexible scalability and can provide a less expensive way to host many applications. Even if you aren't yet ready for Microsoft Azure, you owe it to yourself to become familiar with cloud computing and the services approach to development.

This track includes coverage of the following:

- Azure Functions
- Docker for developers
- Cognitive Services in Xamarin Applications
- Publish Your Angular App to Azure App Services

T01 Go Serverless with Azure Functions

Introductory / Intermediate

ERIC D. BOYD

Tuesday, March 13, 8:00 – 9:15am

Idle CPU cycles are wasteful, but it's likely you have far more computing capacity than you use. Serverless compute architectures have arrived to save us from that waste. Serverless is a shift in how we think about provisioning compute resources and paying for these resources from cloud providers. Instead of deploying resources and underutilizing them, you truly pay for consumption and the compute cycles you use. Azure MVP Eric D. Boyd will show you how Microsoft is enabling serverless compute in Azure with Azure Functions. You'll learn what serverless architectures and Azure Functions are all about. You will get an overview of how to get started developing and running serverless code. And you will explore how to integrate with other services and trigger

your code from events throughout Azure and even in data centers outside of Azure.

Besides the fundamentals of developing and deploying serverless code in Azure Functions, you will learn about the tooling and DevOps capabilities that exist for working with Functions. And last, but not least, you will model the pricing together so you understand the billing model and what to expect when running Azure Functions and when to use Azure Functions over other platforms.

You will learn:

- About serverless compute architecture and Azure Functions
- How to get started developing and deploying Azure Functions
- How to estimate pricing for Azure Functions

T10 Works On My Machine... Docker for Developers

Introductory / Intermediate

CHRIS KLUG

Tuesday, March 13, 1:30 – 2:45pm

There is a lot of talk about containerization today, at least in the Microsoft world. And most of that talk centers around Docker. The rest of the world has been using it for quite a while, but seeing that it is mostly Linux based, it has had some problems getting traction with Microsoft developers. But that is about to change. The technology raises a lot of questions though. What is it? Why is it awesome? How do I get started? How can it help me? Is it just for huge companies like Netflix? Is there any reason to use it if you aren't running a 100-node cluster? Will it blend?

All are valid questions when you are getting started. Once you get over the initial "what is it," you quickly get into "that is really cool" and "why hasn't anyone told me about this before?" And you realize there are a lot of reasons to go further and learn more. This session will provide an introduction to Docker, what it is and what it does, and then a walkthrough of how to get started. You will get to

SESSION DESCRIPTIONS BY TRACK (continued)

see the tools you need, the initial commands you need to know, as well as some demos showing some of the cool things you can easily do with Docker. This will take you from "what is it?" to "this is how you set up a cluster with several containers in minutes."

You will learn:

- What Docker is and what it does
- How to get started with Docker
- How to run containers using images from Docker hub, as well as create custom images, and use them to start containers

W04 Lock the Doors, Secure the Valuables, and Set the Alarm

Introductory / Intermediate

ERIC D. BOYD

Wednesday, March 14, 8:00 – 9:15am

Data center attacks and security breaches are hot topics, but common news today. When considering the cloud, security, privacy, and compliance are often top concerns. And rightfully so, you don't want to be the next big news story. Azure MVP Eric D. Boyd will help you learn how to secure your Azure data center by reducing the exposure for attacks, locking down internal and external communications, protecting your data, and monitoring the activities within your Azure environment. You will get a lap around a number of Azure capabilities including network security groups, Key Vault, VM disk encryption, SQL Database security, Azure Security Center, Next-Generation Firewalls, Web Application Firewalls, and more.

You will learn:

- How to secure the Azure environment, network, servers, services and even your applications
- How to encrypt and protect your data
- How to monitor and audit your Azure environment

W08 Computer, Make It So!

Introductory / Intermediate

VERONIKA KOLESNIKOVA & WILLY CI

Wednesday, March 14, 9:30 – 10:45am

Electronic personal assistants are conquering the world right now. The biggest tech companies are focusing their attention on artificial intelligence to drive them. This opens a wide variety of opportunities for developers. Digital assistants can access different devices, complete tasks, provide all kinds of information or just tell a bedtime story to your kids. You can create custom skills based on your needs and implement them for Alexa, Cortana, and Siri.

During this session, you'll learn about artificial intelligence and how it works in digital assistant applications. You'll see how to start developing a custom skill for Cortana right from your Visual Studio. You'll walk you through UMass Medical School professor' directory skill. And then provide insights of Cortana versus Alexa skills development. You'll get enough inspiration to start developing your own skills.

You will learn:

- How digital assistants work
- How to create custom skill using C#
- Design specific skills

W13 Fast Focus: Serverless Computing: Azure Functions and Xamarin in 20 minutes

Introductory

LAURENT BUGNION

Wednesday, March 14, 2:00 – 2:20pm

One of the most exciting additions to Microsoft Azure is called Functions. This lets developers quickly build and deploy code to the cloud without complicated setup. Also dubbed "serverless computing," Azure Functions can be

triggered by timers, HTTP calls, or database operations. They can communicate with other Azure services or mobile and desktop applications such as those made with Xamarin. This session will give you an introduction to Azure Functions and get you started with this exciting aspect of modern computing.

You will learn:

- What serverless computer is and that there is actually a server
- How to quickly build Azure Functions in the web portal and in Visual Studio
- How Xamarin and Windows applications can use Azure Functions fast

TH04 Cognitive Services in Xamarin Applications

Introductory / Intermediate

VERONIKA KOLESNIKOVA

Thursday, March 15, 8:00 – 9:15am

Artificial intelligence is the next big thing, and all the major tech companies are involved in its development. Now you can implement it too directly in your Xamarin application using Microsoft Cognitive Services. This session will give you basic knowledge about artificial intelligence, machine learning and their applications, go over all six groups of Cognitive Services and see individual APIs available in Azure. You'll also concentrate on some details and specifics of Cognitive Services implementation in Xamarin and Xamarin.Forms solutions. In the end, you will see a demo using Computer Vision API in Azure to implement a personal image organizing app.

You will learn:

- About artificial intelligence and machine learning
- About available Microsoft Cognitive Services
- Practical knowledge of implementing Cognitive Services in Xamarin.Forms applications

SESSION DESCRIPTIONS BY TRACK (continued)

TH08 Publish Your Angular App to Azure App Services

Introductory / Intermediate

BRIAN NOYES

Thursday, March 15, 9:30 – 10:45am

You've gone and built that awesome Angular app. Now you need to get it deployed to the cloud, and you've figured out Azure App Service is a great place to host your apps. So now what? This session will give you a quick walkthrough of how to get your app deployed and running in Azure App Service, whether you build it with the Angular CLI, SystemJS, or using the JavaScript Services templates from Microsoft.

You will learn:

- The differences and similarities between hosting Web apps in Azure App Service compared to traditional internet hosts
- How to set up an Azure Web App service for publishing your app to Azure
- How to use the various options for getting your code deployed into your Azure Web App



DATABASE AND ANALYTICS



SQL Server 2017 is here. And it runs on Linux. But NoSQL databases are here too. Then there's Big Data and data lakes. And well on the rise are machine learning and artificial intelligence. When it comes to data, Visual Studio Live! helps you keep up with the old and the new, the traditional and the disruptive, with coverage including:

- Azure Cosmos DB
- Azure Machine Learning
- CNTK v2 Machine Learning Library
- SQL Server performance
- SQL Server database worst practices
- SQL Server Data Tools

T03 Database Development with SQL Server Data Tools

Introductory

LEONARD LOBEL

Tuesday, March 13, 8:00 – 9:15am

SQL Server Data Tools (SSDT) is a powerful integrated development environment for designing, testing, and deploying SQL Server databases—whether you're working locally or remotely, connected or offline, or in the cloud on Microsoft Azure—all from right in-side of Visual Studio. While SQL Server Management Studio (SSMS) continues to serve as the primary tool for database administrators, SSDT plugs in to Visual Studio as a special database project type designed specifically for the application developer.

This session describes the various difficulties developers face, and demonstrates how SSDT can be used to remedy those pain points. You will learn how to use features such as code navigation, IntelliSense, and refactoring with

your database model—indispensable tools traditionally available only for application development in Visual Studio. You'll learn about the declarative model that lets you design databases offline and under source control right from within solution in Visual Studio, as well as how to deploy to SQL Database on Microsoft Azure. Don't miss out on this demo-centric information-packed session on the current generation of database tools for application developers.

You will learn:

- The benefits of database development with SSDT's declarative model-based architecture
- About the various SSDT features and capabilities (explorer, designers, schema compare, local database runtime, language services, debugging, and buffered editing)
- See live demonstrations of how to design, test, and deploy on-premises data-bases, offline database projects, and Microsoft Azure SQL databases in the cloud all from inside Visual Studio

T07 Introduction to Azure Cosmos DB

Introductory

LEONARD LOBEL

Tuesday, March 13, 9:30 – 10:45am

This session presents an overview of Azure Cosmos DB, a globally distributed, massively scalable, low (single-digit millisecond) latency, fully managed NoSQL database service that is designed specifically for modern web and mobile applications. Like other NoSQL platforms, Cosmos DB supports a schema-free data model, built-in partitioning for sustained heavy-write ingestion, and replication for high availability. But only Cosmos DB offers turnkey global distribution, automatic indexing, and SLAs for guarantees on 99.99 percent availability, throughput, latency, and consistency.

You'll start off learning about NoSQL databases in general, and how they compare with traditional relational database platforms. Then you'll tour the many features of Cosmos DB, including its multi-model capabilities which let you

SESSION DESCRIPTIONS BY TRACK (continued)

store and query schema-free JSON documents (using either DocumentDB or MongoDB APIs), graphs (Gremlin API), and key/value entities (tables API). You'll learn about global distribution, scale-out partitioning, tunable consistency, custom indexing, attachments, and more. You'll also explore client development using the many available SDKs and APIs.

You will learn:

- 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 partitioning, multi-model support, rich query over schema-free data, client development, server-side programming, tunable consistency, indexing, and attachments

W14 Fast Focus: Why You Should Love SQL Server 2017

Introductory to Intermediate

SCOTT KLEIN

Thursday, March 15, 8:00 – 9:15am

Come learn about SQL Server 2017 and gain insight into why "it's just faster". This Fast Focus session will discuss the awesomeness of SQL Server 2017 for both Windows and Linux, including new features, enhancements, and capabilities which make it the best database platform ever.

TH02 Performance in 60 Seconds – SQL Tricks Everybody MUST Know

Intermediate

PINAL DAVE

Thursday, March 15, 8:00 – 9:15am

Data and databases are an important aspect of application development for businesses. Developers often come across situations where they face a slow server response,

even though their hardware specifications are above par. This session is for all developers who want their server to perform at blazing fast speed, but want to invest very little time to make it happen. You'll learn about various database tricks which require absolutely no time to master and require practically no SQL coding at all. After attending this session, you'll only need 60 seconds to improve performance of your database server in their implementation. A quiz during the session will help keep the conversation alive. You'll walk out with scripts and knowledge you can apply to your servers right after the session.

You will learn:

- About the new things related to SQL configurations (like memory, SSMS settings, filegrowth)
- About the differences between auto-update as well auto-create
- The common tricks of SQL deployments which can immediately improve performance like tempdb, memory, CPU configurations, and settings like filegrowth, multiple files which impact performance

TH06 Secrets of SQL Server—Database Worst Practices

Intermediate

PINAL DAVE

Thursday, March 15, 9:30 – 10:45am

"Uh oh! What did I do?" Chances are you have heard, or even uttered, this expression. This demo-oriented session will show many examples where database professionals were dumbfounded by their own mistakes, and could even bring back memories of your own early DBA days. The goal of this session is to expose small details that can be dangerous to the production environment and SQL Server as a whole, as well as talk about worst practices and how to avoid them. This session will focus on some of the common errors and how to resolve them. Developers will walk out with scripts and knowledge they can apply to their servers, immediately after the session.

You will learn:

- About some of the worst practices which produce incorrect results, such as incorrect joins, datatype mismatch, and so on.
- About some of the worst practices which produce slow results, such as implicit conversion, random index mismatch, and so on
- Performance tuning best practices with SQL Server 2016—Cardinality estimate, In-Memory Optimization, and soon

TH10 SQL Server 2017—Intelligence Built-in

Intermediate

SCOTT KLEIN

Thursday, March 15, 1:00 – 2:15pm

SQL Server 2016 and SQL Server 2017 just work, and they work well. If you are a IT professional, though, you want to be armed with all the right diagnostics to react to a mission critical problem or tune the engine to the needs for your business. DevOps also requires the right tools to build and tune queries for maximum performance. SQL Server 2016 and 2017 have all the diagnostics you need just built-in to the product. There is also intelligence built into the engine based on these diagnostics to automate, learn, and adapt. This demo-filled session will show you the wide variety of these built-in diagnostics and performance tools, and you will learn why SQL Server diagnostics are the best in the industry, built-in, and spans all platforms across SQL Server, Azure, and Linux.

You will learn:

- The wide variety of built-in diagnostic and performance tools that let SQL Server learn and adapt, provide the "intelligence"
- Why SQL Server diagnostic and performance tools are the best in the industry across SQL Server, Azure, and Linux
- How to arm yourself with the right tools to build and tune queries for maximum performance, and to be able to appropriately react to mission critical problems

SESSION DESCRIPTIONS BY TRACK (continued)

TH14 Introduction to Azure Machine Learning

Introductory / Intermediate

JAMES MCCAFFREY

Thursday, March 15, 2:30 – 3:45pm

Do you want to know the future? Microsoft Azure Machine Learning (ML) helps you create powerful prediction systems. In this brisk session, Dr. James McCaffrey from Microsoft Research (and one of the developers of Azure ML) will explain what Azure ML can (and can't) do, and present a complete end-to-end logistic regression "Hello World" example. You'll leave this session with a solid understanding of what machine learning is and have all the knowledge you need to begin using Azure ML immediately.

You will learn:

- Exactly what Azure ML can and cannot do
- How to create a logistic regression model using Azure ML
- How to use Azure ML models to make predictions

TH18 Introduction to the CNTK v2 Machine Learning Library

Intermediate

JAMES MCCAFFREY

Thursday, March 15, 4:00 – 5:15pm

Microsoft CNTK v2 is an extremely powerful code library you can use to create deep machine learning prediction models. In this informal in-depth presentation, Dr. James McCaffrey from Microsoft Research will explain exactly what CNTK is, and describe the types of problems CNTK can and can't solve. You will leave this presentation with all the information you need to create a working deep neural prediction system. This session will cover installing CNTK, the CTF data file format and data readers, creating deep neural network layers, understanding squared error vs. log loss, training with advanced stochastic gradient descent,

model evaluation, and transferring a CNTK model to a C# program.

You will learn:

- Exactly what CNTK can and cannot do
- How to create a deep neural prediction system using CNTK
- How to transfer a CNTK model to a C# program

NATIVE CLIENT



Native applications, whether they're running on Windows, iOS and Android are of utmost importance. Mobile apps are becoming a common vehicle to facilitate users' interaction with each other, their organizations and their business applications. In the desktop arena, it can be easy to forget that there are more than a billion Windows PCs in the world and Windows remains the dominant OS. This track is focused on building native mobile apps with tools like Xamarin and Windows apps using XAML and other technologies. There is coverage of:

- Mobile development in C# with Xamarin and Visual Studio
- Xamarin and Xamarin Forms
- Mixed Reality for HoloLens and Immersive Headsets
- Cross-Platform Apps in C# with CSLA.NET
- Cross-Platform device testing
- Advanced Xaml

T02 Getting Ready to Write Mobile Applications with Xamarin

Introductory

KEVIN FORD

Tuesday, March 13, 8:00 – 9:15am

The need to create a mobile app is becoming much more common and more of us are finding ourselves in a position of needing to write such an app using Xamarin and not knowing where to start. What machines do I need, should I use the native platform version or Forms, how do I handle security, what machine do I need, how about frameworks, which ones of those do I need, how do I structure the solution for code sharing? The list goes on and on. If you haven't written a lot of mobile applications before, the number of different things to learn can be overwhelming. This session will cover all the pieces that need to be in place and what combinations of decisions, tools and frameworks can lead to successful mobile solutions.

You will learn:

- When to use the Xamarin native platform when Xamarin to use Forms and when it is best to use both
- Successful ways to structure your solution and combinations of packages and frameworks will work well together
- The pieces that need to be put into place to make a Xamarin mobile application and get it out to the people who need to use the application

T06 Lessons Learned from Real World Xamarin.Forms Projects

Intermediate

NICK LANDRY

Tuesday, March 13, 9:30 – 10:45am

Sometimes it's not the 101 tutorials you need to help you in your development journey, but to just talk to someone who has experience in implementing that technology in the real world. What are the gotchas, things to avoid or best practices others have learned that can give you a leg

SESSION DESCRIPTIONS BY TRACK (continued)

up in implementing a new technology within your current architecture? This session will cover real-world considerations in Xamarin.Forms projects such as UI design considerations when sharing a user experience across iOS, Android and Windows, including navigation paradigms, styling, and supporting older versions. You'll also look at code-sharing pitfalls and best practices, choosing an MVVM framework, application resource sharing, and leveraging plugins and the Dependency Service to leverage platform-specific code. Finally, you'll talk about mobile DevOps, including source control in a cross-platform environment, gathering application analytics, crash logs, and handling app flighting during development and beta testing. Come learn from a wealth of knowledge accumulated in real-world cross-platform projects, and get ready to build your own.

You will learn:

- About the key decisions that must be taken before undertaking a mobile cross-platform project
- Best practices for Xamarin.Forms derived from experiences on real-world business applications
- About the role of DevOps in mobile app development, and how to implement a successful mobile DevOps strategy

T14 Customizing Your UI for Mobile Devices: Techniques to Create a Great User Experience

Intermediate

LAURENT BUGNION

Tuesday, March 13, 3:00 – 4:15pm

In today's world, you develop applications for a number of devices, screen sizes, form factors and capabilities. While much of the underlying code can be shared across the platforms using frameworks like Xamarin or the Universal Windows Platform, you need to spend time on the user interface to customize and adapt it to the screen on which it will run. This is a manual process that requires some experience with the visual designers, as well as techniques like design-time data, the responsive design patterns ("the 6 Rs") and some tips to bend the visual designers to your advantage. Learn from Laurent Bugnion, who has 20 years of experience trying to make designers happy with HTML, VB6, Java, WinForms, XAML, Android, iOS and more. You'll see

demos with Blend and XAML, Xamarin.Android, Xamarin.iOS and Xamarin.Forms, and leave this session with a lot of tricks in your sleeve to create a better user experience that delights your users on every on every device.

You will learn:

- Design patterns that will allow your application to shine on all platforms and form factors
- How to make the best of the visual designers by learning techniques that will make your workflow much more effective
- How to use old and new tools to create pixel perfect applications

W02 Building Mixed Reality Experiences for HoloLens & Immersive Headsets in Unity

Intermediate

NICK LANDRY

Wednesday, March 14, 8:00 – 9:15am

Mixed Reality blends people, places, and things across a full spectrum—from the real-world to digital virtual worlds. This session is your introduction to building 3D applications and games for Windows Mixed Reality using C#, Visual Studio and Unity. You'll start with a quick recap of Mixed Reality, the HoloLens device, immersive headsets and the Universal Windows Platform (UWP), and talk about interacting with holograms using gaze, gestures, and voice. Next, you'll dive into building 3D apps for Windows Mixed Reality in Unity with C#, using the Mixed Reality Toolkit for Unity, exporting your project to Visual Studio and running it on either a HoloLens device, an immersive Mixed Reality headset, or the HoloLens Emulator. Science fiction becomes science fact, and Unity and UWP developers are at the front of this revolution. Come learn how to get started and build your journey into a world of holograms you create.

You will learn:

- The principles of Mixed Reality and how the Microsoft HoloLens works
- How to get started with 3D app development for Windows Mixed Reality using Visual Studio, Unity and C#
- How to use the Mixed Reality Toolkit for Unity for Gaze, Gestures, Voice and Spatial Mapping

W06 A Dozen Ways to Mess Up Your Transition From Windows Forms to XAML

Introductory / Intermediate

BILLY HOLLIS

Wednesday, March 14, 9:30 – 10:45am

XAML is the default technology for native applications, including desktop and mobile. Lots of businesses will be transitioning into XAML from platforms such as Windows Forms. But that transition has many ways to go off the rails. In this session, you'll see a dozen ways to do the transition badly, from spoofing older interfaces to garish overuse of gradients and animations to poor code and XAML organization that will lead to a maintenance nightmare. Based on working with dozens of clients since XAML was introduced, Billy Hollis will show you some of the worst results and outcomes, and help you understand how to avoid them.

You will learn:

- The most common ways teams approach XAML incorrectly
- The risks that come from the difficult learning path for XAML
- How to leverage the XAML platform to get more value

W10 Fast Focus: Cross Platform Device Testing with xUnit

Introductory

OREN NOVOTNY

Wednesday, March 14, 1:30 – 1:50pm

Discover how to run test your mobile apps and class libraries with xUnit for Devices.

You will learn:

- The difference of xUnit vs NUnit
- How to get started with unit tests that run on a physical device or emulator
- About patterns for sharing code between test projects

SESSION DESCRIPTIONS BY TRACK (continued)

W16 Building Cross-Platforms Business Apps with C# and CSLA .NET

Intermediate

ROCKFORD LHOTKA

Wednesday, March 14, 2:30 – 3:45pm

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.

W20 Radically Advanced XAML: Dashboards, Timelines, Animation, and More

Advanced

BILLY HOLLIS

Wednesday, March 14, 4:00 – 5:15pm

You've probably learned just enough XAML to get by. You know how to create typical business application screens, but you don't have the time to learn enough to really drive XAML to its potential. This session is your shortcut. You'll see tangible techniques of advanced XAML, inspired by real projects. If you are a XAML noob, you can come and see what's possible, but these demos are for people who already know the basics of XAML and want to go deeper.

You will learn:

- About layering, composition, and other techniques to produce results in XAML you can't get in other UI technologies
- The design and architecture of a XAML dashboard
- How to show time-based data with advanced layout

SOFTWARE PRACTICES



Every developer knows 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.

Topics in this track include:

- Mobile dev challenges in the Enterprise
- Feature toggles
- Microservice architecture
- Writing Testable code
- Writing asynchronous .NET code
- Dependency injection

W03 Using Feature Toggles to Separate Releases from Deployments

Introductory / Intermediate

MARCEL DE VRIES

Wednesday, March 14, 8:00 – 9:15am

Feature toggles can help you by running a 24x7 operation and implement continuous deployment. In this session, you'll look at what feature toggles are, how to use them to

separate releases and deployments, and how to implement this in your software using existing frameworks.

You will learn:

- What are feature toggles
- How to separate deployments from releases
- How to apply this in existing applications

W07 Overcoming the Challenges of Mobile Development in the Enterprise

Introductory

ROY CORNELISSEN

Wednesday, March 14, 9:30 – 10:45pm

Mobility has taken flight in recent years and is becoming prevalent in the enterprise. Suddenly organizations are faced with many choices, ranging from a choice of devices/platforms to support, enabling Bring Your Own Device policies, development strategies and management/governance issues. This session will cover some of these issues, and more specifically, how some aspects may bite each other. You'll learn about some pitfalls experienced when building cross platform applications with Xamarin in combination with Enterprise Mobility Management platforms.

You will learn:

- About building enterprise mobile apps for multiple platforms
- Patterns for integrating with legacy back office systems
- About having to deal with rolling out apps in an enterprise environment using an EMM platform such as Intune, AirWatch, and so on
- About the choices that need to be made when building apps in an enterprise setting

SESSION DESCRIPTIONS BY TRACK (continued)

TH03 Demystifying Microservice Architecture

Intermediate / Advanced

MIGUEL CASTRO

Thursday, March 15, 8:00 – 9:15am

Here we go again with 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 two-fold. First, many are too hung up on the technology to use. It's got to be REST, they have to be small (it's micro remember), you've got to use Docker, and so on. All sarcasm aside, 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 not, 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. You'll learn what microservices are, what a microservice architecture is, and you'll discuss the characteristics at the service level and with everything that surrounds them in the architecture. You'll learn about the concept of "design for failure" while covering topics like hosting, discoverability, failover, and the often-confusing API Gateway are some of the things you will need to understand before you embark on the adventure that is a microservice architecture and is it even something that will work for you.

You will learn:

- About removing technology hangups
- About defining microservices
- About holistic architecture approaches

TH07 Unit Testing Makes Me Faster: Convincing Your Boss, Your Co-Workers, and Yourself

Introductory

JEREMY CLARK

Thursday, March 15, 9:30 – 10:45am

Bosses hate unit testing. They see it as code that doesn't contribute to the final product. And maybe you see testing that way as well. But here's the truth: unit testing makes us faster. You'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, you can show your boss (and yourself) how unit testing makes us faster.

You will learn:

- How to increase confidence and reduce manual testing with automated unit tests. Result: Go faster
- How to catch bugs early in the development life-cycle with automated unit tests. Result: Go faster
- How to reduce the number of regression bugs when changing existing code. Result: Go faster

TH11 Writing Testable Code and Resolving Dependencies—DI Kills Two Birds with One Stone

Intermediate

MIGUEL CASTRO

Thursday, March 15, 1:00 – 2:15pm

Dependency Injection (DI) is one of those terms advanced programmers throw out with an expectation and assumption of full understanding on the part of the receiver. People often wonder what is a good DI product and how to use it. It's easy to get infatuated by a cool buzz phrase, especially when you hear so many others using it. But to truly understand something you need

to start by understanding the problem spaces that it is trying to solve. To write testable software, you need to understand and embrace abstractions and injecting them. But then you introduce the problem of having to resolve dependency chains. This is where using a DI container helps you solve both these issues. You'll learn how to make your code testable and maintainable with the help of a DI container. If this is something your organization has not fully embraced yet, come and prepare for a tremendous wow factor.

You will learn:

- About demonstrating problem code
- How to embrace abstractions for across-the-board testability
- About using a full-featured DI container

TH19 I'll Get Back to You: Task, Await, and Asynchronous Methods

Introductory / Intermediate

JEREMY CLARK

Thursday, March 15, 4:00 – 5:15pm

There's a lot of confusion about async/await, Task/TPL, and asynchronous and parallel programming in general. So this session will start with the basics and look at how you can consume asynchronous methods using Task and then see how the "await" operator can make things easier. Along the way, you'll look at continuations, cancellation, and exception handling.

You will learn:

- How to consume asynchronous methods using Task (for flexibility) or await (for easy use)
- How to handle exceptions that happen in asynchronous methods
- About request and respond to cancellation

SESSION DESCRIPTIONS BY TRACK (continued)

VISUAL STUDIO / .NET FRAMEWORK



Microsoft continues to deliver updates to its dev tools at a rapid pace. 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. The 2018 version promises tons of new enhancements and features to make Visual Studio better, not to mention Microsoft's continued investment into open source and cross-platform development.

Topics in this track include:

- What are the latest features in Visual Studio
- .NET Core
- .NET Standard
- MVVM
- Analyzing .NET Core Code
- Multitargeting
- Code signing

T04 What's New in Visual Studio 2017 for C# Developers

Intermediate

KASEY UHLENHUTH

Tuesday, March 13, 8:00 – 9:15am

Visual Studio is a productivity game changer for C#. The .NET Compiler Platform ("Roslyn") enables many new experiences that will change the way you write and debug code. This session will dig into features that bring a new level of awesome to the C# language and IDE

experience. Come learn about code style configuration and enforcement, refactoring support, major debugging enhancements, code-aware frameworks, and much more.

T08 Using Visual Studio Mobile Center to Accelerate Mobile Development

Introductory

KEVIN FORD

Tuesday, March 13, 9:30 – 10:45am

It can be hard to put together all the pieces you need to backend your mobile applications. Microsoft attempts to simplify this by creating a cohesive product with Visual Studio Mobile Center. Mobile builds, cloud testing, analytics, test deployments and event push notifications can be found here. It's not just Microsoft development technologies either. Swift app? No problem. React Native app? No problem. Android app with Java? No problem. Many existing mobile development technologies can all tie into VSMC. This session will look at what VSMC is and how you can use it to simplify building mobile applications.

You will learn:

- How to create automated build processes for iOS, Android and UWP apps using a variety of development technologies and distribute the builds to your testing teams
- Demonstrate creating automated test scripts and running them on devices in the cloud
- How to Collect analytics and crash information for your applications

W11 Fast Focus: Understanding .NET Standard

Introductory / Intermediate

JASON BOCK

Wednesday, March 14, 1:30 – 1:50pm

.NET Standard is the wave of the future, the solution to every issue, and is proven to make developers 6.3 times happier than they've ever been before. OK, some of that

may not be entirely true, but .NET Standard is a term that is getting a lot of press lately. But what does it mean? This session will cut to the chase and show exactly what is .NET Standard.

You will learn:

- How .NET Standard is defined
- How .NET Standard projects work
- Insight into using .NET Standard in your applications

W18 Getting to the Core of .NET Core

Introductory

ADAM TULIPER

Wednesday, March 14, 2:30 – 3:45pm

.NET Core is truly a new technology that is fast, efficient, cross platform, and open source. It also shares many similarities with the .NET we've known and loved for years. This session explains exactly what .NET Core is, but doesn't stop there. You'll dive deep into what the architecture and the runtime is – including how it works across different platforms like Windows, OSX, and Linux. This session will also explore how your apps are loaded and who hosts them, how the runtime finds tools to run commands on, and deeper subjects like what the muxer is, getting true side by side deployment, runtime identifiers, the new .NET Standard, and more.

You will learn:

- Where you can use your existing code with .NET Core
- How your applications are loaded with .NET Core
- The architecture behind .NET Core

W22 Porting MVVM Light to .NET Standard: Lessons Learned

Intermediate / Advanced

LAURENT BUGNION

Wednesday, March 14, 4:00 – 5:15pm

.NET Standard is the new way to create portable assemblies. After learning about portable class libraries in the past years, it is now time to upgrade your game and start

SESSION DESCRIPTIONS BY TRACK (continued)

coding for Linux, Mac OS and other platforms untouched by .NET until now. More libraries are getting ported to .NET Standard, sometimes really easily and sometimes more painfully. This session will help you understand why .NET Standard can benefit you, and you'll learn about experiences converting frameworks to .NET Standard.

You will learn:

- What .NET Standard is
- How to convert your own libraries to .NET Standard
- Hear "from the field" how to work around issues

TH12 Signing Your Code the Easy Way

Intermediate

OREN NOVOTNY

Thursday, March 15, 1:00 – 2:15pm

Dive into code signing and learn why you want to be attaching signatures to your code and how to quickly and securely incorporate code signing into your CI/CD pipeline.

You will learn:

- Introduction to code signing and Authenticode
- How to get a code signing service setup quickly and securely for your organization that supports any Authenticode-supported file type, Windows Store packages (for side-loading), ClickOnce, and NuGet packages
- How Azure Key Vault can protect your code signing certificates in its Hardware Security Module (HSM)

TH16 Analyzing Code in .NET

Intermediate

JASON BOCK

Thursday, March 15, 2:30 – 3:45pm

We all want to have someone else review our code to make sure it's written well. Wouldn't it be even better if we can have that review process done automatically? This session will show you how you can use static analysis tools (like Code Analysis/FxCop) to find all kinds of implementation issues before they show up in a release. You'll also see

how you can create your own analyzers to hunt down problematic areas in code.

You will learn:

- The benefits in using static analysis
- How to use the results of static analysis effectively to improve their code
- How analyzers can be created to reflect their own best practices

TH20 Multi-targeting the World: A Single Project to Rule Them All

Intermediate / Advanced

OREN NOVOTNY

Thursday, March 15, 4:00 – 5:15pm

This is an introduction to creating single and multi-targeted .NET Standard class libraries using the new "SDK-style" project system. You'll recap what .NET Standard, what problems it solves, and how to get started. Next, you'll dive into some of the new capabilities of the "SDK-style" project type, learn how to consolidate projects that need to target multiple platforms into a single project, and easily create a NuGet package for the library. Finally, you'll see how to convert an older class library into a .NET Standard library.

You will learn:

- About the .NET Standard, where it is, what it supports, and where it came from
- About multi-targeting with the new "SDK-style" projects, how and why to multi-target, and how to create NuGet packages to distribute the result
- How to convert a portable class library to a .NET Standard class library

WEB CLIENT



The browser and JavaScript provide perhaps the highest and best abstraction over every operating system, helping developers build Web apps that run across browsers, platforms, and operating systems. This is possible in large part due to various JavaScript frameworks such as Angular, Aurelia, and many others. This track will arm you with the knowledge to be part of this next-generation Web app development wave based on JavaScript and HTML5:

- Angular 2
- Angular Components
- Securing Angular Apps
- WebAssembly
- TypeScript
- Using Chrome for client-side development

T05 Angular 101

Introductory

DEBORAH KURATA

Tuesday, March 13, 9:30 – 10:45am

This beginner-level session introduces the .NET developer to Angular, the very popular JavaScript framework for building client-side applications. You'll learn about key building blocks such as modules, components, and templates. Come and get a quick start to building successful Web applications with Angular.

You will learn:

- Angular terms and concepts
- The basics of building an Angular application using the Angular CLI
- Angular's data binding features and syntax

SESSION DESCRIPTIONS BY TRACK (continued)

T09 Busy Developer's Guide to Chrome Development

Introductory

TED NEWARD

Tuesday, March 13, 1:30 – 2:45pm

When Google introduced Chrome, the world pretty much took it on faith that it would look to adhere to the Web standards: HTML, JavaScript, CSS, and others. And when Google sought to give developers opportunities to extend the browser using browser-specific extension points, it was nothing more subversive than what Microsoft, Firefox, Netscape or Apple had done before. But Google chose to use the same tools—HTML, JavaScript, CSS, and others—to provide those extensions, and in some ways, avoided some of the pain points that previous native-code-based browser extensions ran into. This session will cover the tools and APIs that a developer can use to build a Chrome extension—and when they can be useful, and when they just annoy people.

You will learn:

- The different Chrome extension points
- How to build a Chrome extension
- The “why” one might look to do this

T13 Angular Component Communication

Intermediate

DEBORAH KURATA

Tuesday, March 13, 3:00 – 4:15pm

Communication is the key to every successful relationship. That includes the relationship between the components of an Angular application. This session details key techniques for passing and sharing data and subscribing to notifications so that components can work together effectively. Techniques include Input and Output parameters; service as a property bag or a data repository; and using Subject, BehaviorSubject and other Observables.

You will learn:

- Understand how to use Input and Output parameters to communicate between a parent and child component
- Learn how to build a simple service as a property bag or data repository
- Leverage Subject, BehaviorSubject, and other Observables to pass data and send notifications between components

W05 TypeScript: The Future of Front End Web Development

Intermediate

BEN HOELTING

Wednesday, March 14, 9:30 – 10:45am

TypeScript is the real deal. Many developers have heard of TypeScript but most have never used it in production. Many C# developers hate JavaScript. That probably has nothing to do with JavaScript but with the lack of tooling and language features. TypeScript is a language developed by the creators of C# that compiles to JavaScript. This session will dive into TypeScript and discuss some of the language features it provides on top of normal JavaScript. Between the IDE enhancements in VS and the language features of TypeScript, you will see that JavaScript development can be fun.

You will learn:

- A definition of TypeScript
- New TypeScript Features in VS
- How to use VS and TypeScript to make production quality applications

W15 Advanced Fiddler Techniques

Intermediate

ROBERT BOEDIGHEIMER

Wednesday, March 14, 2:30 – 3:45pm

Fiddler is a great free web diagnostic tool that nearly everyone uses, but they typically use it only for very basic things. If all you need is to see the requests made between the browser and web server, the browser devtools can do that. Fiddler has many more advanced features that most developers don't know about. You can use it to capture traffic from smartphones, tablets, and non-Windows platforms. Discover the power of manipulating requests 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
- 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

W19 Assembling the Web—A Tour of WebAssembly

Intermediate

JASON BOCK

Wednesday, March 14, 4:00 – 5:15pm

WebAssembly ... what is it exactly? Is it a new VM? A way to create a binary version of JavaScript? A new standard to get everyone to code in C/C++ for the web? This session will demystify WebAssembly, demonstrate exactly what it is, and provide insight into how this will affect JavaScript and web development in the future.

SESSION DESCRIPTIONS BY TRACK (continued)

You will learn:

- What WebAssembly is all about
- See WebAssembly in action
- Insight into this new aspect of web development

WEB SERVER



ASP.NET has been Microsoft's core Web development platform since 2002.

Starting with Web Forms at the very beginning, then morphing into MVC and ASP.NET Web Pages, it's been quite a ride. And just when you thought you knew the ropes, there's now ASP.NET Core 2.0, accelerating the change that is comparable in magnitude to the move from classic Active Server Pages to ASP.NET in the first place. The Visual Studio Live! Web Server track covers all this and more. Come take in the content, to get current and stay that way, with topics including:

- ASP.NET Core 2
- ASP.NET Core Security
- Entity Framework Core 2
- MVVM and ASP.NET Core Razor
- Security Web and Web API Apps

W01 The Whirlwind Tour of Authentication and Authorization with ASP.NET Core

Intermediate / Advanced

CHRIS KLUG

Wednesday, March 14, 8:00 – 9:15am

Authentication and authorization is not a fun topic for most people. It's generally that thing that has to be there, but nobody really cares about. And on top of that, every time the requirements are a little different. And every

time we have to figure out how to write all the plumbing to get it done properly. It is security after all. In ASP.NET Core, Microsoft has made it fairly easy to get it all done. In most cases, it is only a few lines of code and some minor configuration, and you are up going. However, if you don't know the lines of code and the config, it can be hard. This session will present a heap of different types of authN and authZ. There will be social logins, local logins, AD-based logins, and even token based authentication for SPAs. Basically, everything you need to get up and running when it comes to authenticating your users in ASP.NET Core.

You will learn:

- How authentication and authorization is set up in ASP.NET Core
- How outsourcing our authentication needs to 3rd parties can be both easy, and more secure than handling the credentials ourselves
- How OAuth and OpenID Connect can help us in a lot of our authentication scenarios

W12 Fast Focus: HTTP/2: What You Need to Know

Intermediate

ROBERT BOEDIGHEIMER

Wednesday, March 14, 2:00 – 2:20pm

The HTTP 1.1 protocol has served us long and well, but HTTP/2 is better designed for modern websites. Existing sites should just work with the latest version, but they can drop many of the old tricks they used to squeeze out performance like CSS Sprites, domain sharing and file bundling. This session will review the major features of HTTP/2 and how to best utilize the new protocol.

You will learn:

- Performance techniques that should not be used anymore
- Strategies for adopting HTTP/2 while still supporting HTTP 1.1
- Single HTTP connection to reduce overhead and improve efficiency

W21 Encrypting the Web

Intermediate

ROBERT BOEDIGHEIMER

Wednesday, March 14, 4:00 – 5:15pm

Does your entire web site require HTTPS? If it doesn't now, it better soon. Browser vendors have been pushing us in that direction for a while, requiring HTTPS to use new features like HTTP/2 and service workers. Recently Chrome also decided to mark pages as "not secure" if they have a form field on a page with HTTP. Discover the many benefits of using HTTPS beyond just confidentiality. Learn about the misconceptions around HTTPS, and that it isn't as hard to implement as you think.

You will learn:

- Common misconceptions about HTTPS
- The major benefits of a web site that complete uses HTTPS
- Techniques for converting your existing web site

TH01 ASP.NET Core 2 For Mere Mortals

Intermediate / Advanced

PHILIP JAPIKSE

Thursday, March 15, 8:00 – 9:15am

ASP.NET has changed in revolutionary ways. This session will show you what you need to know to move to ASP.NET Core for Web applications and RESTful services.

You will learn:

- New ASP.NET Core features such as tag helpers and view components
- How to create RESTful services with ASP.NET Core
- About the philosophy of .NET Core and ASP.NET Core

SESSION DESCRIPTIONS BY TRACK (continued)

TH05 Getting to the Core of ASP.NET Core Security

Introductory

ADAM TULIPER

Thursday, March 15, 9:30 – 10:45am

ASP.NET Core is an exciting new framework. With any new framework comes concerns about learning new techniques. Is our knowledge applicable to this new technology? Thankfully, many things are the same as the ASP.NET in the .NET Framework, though there are some differences. This session will look at some of the various security options available to allow various means of authentication/authorization. It's essential though to understand some of the security additions developers have available to them via modern specifications that browsers implement. You'll explore some of the more modern techniques to also secure your sites.

You will learn:

- About security options available for your ASP.NET Core web applications
- About modern security techniques and when to use them
- How various authentication options work with ASP.NET Core

TH09 Entity Framework Core 2 For Mere Mortals

Intermediate

PHILIP JAPIKSE

Thursday, March 15, 1:00 – 2:15pm

Writing data access code is tedious and mundane. The simple act of creating the CRUD (Create, Read, Update, Delete) operations doesn't add business value to your application, but it is an absolute necessity. This session will show you the core features of EF Core 2 and how it can save you valuable time that is much better spent on

providing business value and compelling features into your applications.

You will learn:

- How to get started with EF Core 2
- How to use EF to speed up development
- How to build full data access layers with EF Core

TH13 MVVM and ASP.NET Core Razor Pages

Intermediate

BEN HOELTING

Thursday, March 15, 2:30 – 3:45pm

ASP.NET MVC applications require quite a bit of convention and understanding just to create a simple Hello World application. Many times, you simply want to create a page and navigate to it. Simple, right? Wrong—using MVC this requires a controller, a view, an understanding of routing and the conventions put in place by ASP.NET MVC. Razor pages are a new concept currently in the early stages of development by the ASP.NET team. The idea is to use the Razor syntax outside the boundaries of ASP.NET MVC. This lets web developers implement a clean MVVM pattern for basic and complex ASP.NET Core applications. This session will introduce Razor pages and demonstrate how to use them with the MVVM pattern.

You will learn:

- How to define Razor Pages
- How to create an MVVM application using Razor pages
- How to define the pros and cons of Razor pages versus ASP.NET MVC

TH17 Securing Web Apps and APIs with IdentityServer

Introductory / Intermediate

BRIAN NOYES

Thursday, March 15, 4:00 – 5:15pm

IdentityServer is an open source framework for building authorization servers that support a bunch of different authentication and authorization protocols, most importantly OAuth, OpenID Connect, and ADFS. In this session, you'll learn about IdentityServer capabilities, how to set up IdentityServer to support a single ASP.NET Web Site or Web API, or to set it up as a central authentication server enabling Single Sign On (SSO) from all your client apps.

You will learn:

- How to set up and configure IdentityServer as a Single Sign On authentication server
- How to set up authentication and authorization in your Web APIs and MVC pages based on an IdentityServer sign in and access control tokens
- What the options are for different degrees of authorization logic in your apps



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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.

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

Lafe Low

Editorial Manager, Visual Studio Live!



Lafe Low has been a technology editor and writer for more than 25 years. Most recently, he was the editor in chief of TechNet magazine. He has also held various editorial positions with Redmond magazine, CIO magazine, and InfoWorld. He also launched his own magazine entitled Explore New England, and has published four editions of his guidebook Best Tent Camping: New England, as well as Best Hikes on the Appalachian Trail: New England and 60 Hikes within 60 Miles of Boston.

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

“THE INSTANT IMMERSION INTO MANY DIFFERENT AREAS OF TECHNOLOGY HAS BEEN THE HIGHLIGHT OF THE CONFERENCE. IT PROVIDED ENOUGH WORKING KNOWLEDGE TO BEGIN IMMEDIATE INTEGRATION AT WORK.”

– Robert Micks, Grand Canyon University

CONFERENCE SPEAKERS

Brock Allen

Application Security Architect, Solliance



Brock Allen is an application security consultant for Solliance. He has 20 years of industry experience, and specializes in .NET, web development, and web-based security. Brock is the co-author of many security related open source frameworks including IdentityServer, IdentityManager, and MembershipReboot. He also frequently posts to the ASP.NET forums, he is an MVP for ASP.NET/IIS, a member of ASPInsiders, and a contributor to the ASP.NET platform. @BrockLAllen

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, which provides business solutions with web technologies. Robert has been developing web sites for the past 22 years. He is an ASP.NET MVP, a Telerik Developer Expert, 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.responsiveX.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 since 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>.

Damian Brady

Cloud DevOps Advocate, Microsoft



Damian is a DevOps cloud developer advocate at Microsoft. He's Australian, but currently lives in Canada. He's a book and Pluralsight author, and regularly speaks at conferences, user groups, and other events around the world. Damian spends his time helping development teams succeed with better DevOps strategies. @damovisa

Laurent Bugnion

Senior Global Azure Advocate, Microsoft



Laurent Bugnion currently works as senior global Azure advocate for Microsoft. He spent almost 10 years with IdentityMine and Valorem, two leading firms in using and deploying Microsoft technologies. He is one of the foremost experts for XAML and C# based development. He codes in Windows, WPF, Xamarin (iOS and Android), Unity, ASP.NET. In his free time, he writes for technical publications such as MSDN Magazine and his blog at blog.galasoftware.ch. He is a frequent speaker at conferences such as Microsoft MIX, TechEd, VSLive, TechDays and many other international events. Prior to joining Microsoft, he was a Microsoft Most Valuable Professional for Windows development from 2007 to 2017, a Microsoft Regional Director from 2013, and a Xamarin Most Valuable Professional from 2015. He is also the author of the well-known open source framework MVVM Light for Windows, WPF, Xamarin, and of the popular Pluralsight reference course about MVVM Light. @LBUGnion

Miguel Castro

President, Melvicorp 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

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– Kristen Runkle, Vencore

CONFERENCE SPEAKERS (continued)

Willy Ci

Sr. Front-end Developer, UMass Medical School



Willy Ci is a senior front-end developer with UMass medical school. For more than twenty years, he has worked with numerous cutting-edge technologies, such as Microsoft HoloLens, Unity, 3D printing, and WebGL while following his passion for creating innovative solutions in a quickly evolving space. Willy graduated from UMass Amherst, was trained by IBM, molded by few startups, and ended up with UMass medical school. Willy is passionate about panorama photography, creating VR/AR applications, loves to try out new things, he has lots of ideas, and never has enough time to sleep. Follow Willy through his website at <http://FlexCode.org/> and Twitter @Willy_Ci.

Jeremy Clark

Developer Educator, JeremyBytes.com



Jeremy Clark likes to help make 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

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

Pinal Dave

SQL Server Performance Tuning Expert



Pinal Dave is a SQL Server performance tuning expert and an independent consultant. He has authored 11 SQL Server database books, 21 Pluralsight courses, and has written more than 4,100 articles on database technology on his blog at a <https://blog.sqlauthority.com>. Along with more than 16 years of hands-on experience, he holds a Master's of Science degree and a number of database certifications. @pinaldave

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 Xpirit 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

Kevin Ford

Mobile Practice Lead, Magenic



Kevin Ford is the mobile practice lead for Magenic. He leads development efforts with native mobile technologies, Xamarin, and Cordova. For more than twenty years, he has worked with enterprise application development using the Microsoft stack. He moved to native to follow his passion for creating innovative solutions in a quickly evolving space. Kevin is an accomplished architect and thought leader at Magenic and continues to build and expand as the mobile space changes. He works with each region to ensure Magenic consultants have the right relationships, resources, and opportunities to advance their mobile technical skills. Kevin holds an MBA from Babson. @Bowman74

CONFERENCE SPEAKERS (continued)

Ben Hoelting

Senior Technologist, Aspenware



Ben Hoelting is a senior technologist with Aspenware and a C# MVP. He graduated from Colorado State University in 1997 with a BS in Computer Information Systems and a Minor in Computer Science. Ben joined the IT industry in 1996 as an intern and has worked with .NET since its inception in 2001. This has given him the experience of a senior level full stack .NET developer. He is an experienced speaker and presents at the Visual Studio Live conferences all around the country. He loves sharing his experiences developing software. Ben is a Microsoft Certified Technology Specialist (MCTS) for Web and Windows .NET 4.0. His blog is at <http://www.benhblog.com> and his twitter stream is at <http://twitter.com/benhnet>. Ben is also involved in the local .NET community and is the leader of the South Colorado .NET User Group. @benhnet

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 focuses 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

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 coach 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>.

Scott Klein

Data Platform Technical Evangelist, Microsoft



Scott Klein is a Microsoft data platform technical evangelist who lives and breathes data. His passion for data technologies brought him to Microsoft in 2011 and has allowed him to travel all over the globe evangelizing SQL Server and Microsoft's Big Data and cloud data services. Prior to Microsoft, Scott was one of the first four SQL Azure MVPs, even though those don't exist anymore. Scott has authored several books about SQL Server and Azure SQL Database and continues to look for ways to help developers and companies grok the benefits of cloud computing. He also thinks "grok" is an awesome word. Scott's fascination with data and the growth of Big Data and the Internet-of-Things (IoT) technologies has led him to the fantastic world of data discovery and data analytics. @SQLScott

Chris Klug

Senior Software Developer, Tretton37



Chris Klug is an adrenaline loving, problem solver/creator who loves building things. He spends his days writing code and solving problems for clients at a company called Novatrox in Stockholm, and his nights sleeping. Except for the days he spends at conferences, talking about doing things he is passionate about, and the days he fills with mountain biking, kiteboarding, or RC helicopter flying. For the last 15 or so years, he has been solving problems for customers. But if he could choose, he'd go to the beach and kiteboard every time. @ZeroKoll

Veronika Kolesnikova

Developer, Rightpoint



Veronika Kolesnikova is passionate about backend web development, mainly with Microsoft technologies like C#, .NET, SQL, and Azure. She loves to learn new development tools and languages and share that knowledge with the community. She recently started working with Xamarin and can't wait to provide her insights. Last year, Veronika graduated with MS degree in Information Technology. In her free time, she likes dancing, traveling, and practicing aerial yoga. @breakpointv16

Deborah Kurata

President, InStep Technologies, Inc



Deborah Kurata is a software developer, speaker and Pluralsight author with a focus on Angular and C#. For her work in support of software development and software developers, she has been recognized with the Microsoft Most Valuable Professional (MVP) award and is a Google Developer Expert (GDE). Follow her on twitter: @deborahkurata

CONFERENCE SPEAKERS (continued)

Nick Landry

Senior Technical Evangelist, Microsoft



Nick Landry (@ActiveNick) is a mobility pioneer and former entrepreneur specializing in solving technical problems through mobility, mixed reality, IoT, AI, and the cloud. Nick works at Microsoft in Commercial Software Engineering (CSE) as a senior technical evangelist in the New York Metro area. He spent most his career in IT consulting, software, and services companies across various technical and business roles, designing, building, managing, and selling innovative software solutions for the world's top brands and Fortune 500 companies. Known for his dynamic and engaging style, he is a frequent speaker at major software development conferences worldwide, is an active Open Source contributor, and was a 10-year Microsoft MVP prior to joining Microsoft. With more than 25 years of professional experience, Nick is a certified developer and software architect by trade and specializes in HoloLens and mixed reality, cross-platform mobility, computer speech and bots, and the Internet of Things. He is an active coder, occasional author, avid gamer, loving husband, and proud father.

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

James McCaffrey

Research Software Engineer, Microsoft



James McCaffrey works for Microsoft Research in Redmond, WA. James has a PhD from the University of Southern California, an MS in computer science, a BA in cognitive psychology, and a BA in mathematics. James has worked on several key Microsoft products, including Internet Explorer and Bing, and is the senior contributing editor for Microsoft's MSDN Magazine. James learned to speak to the public when he worked at Disneyland during college, and he can still recite the entire Jungle Cruise ride narration from memory.

James Montemagno

Principal Program Manager – Xamarin, Microsoft



James Montemagno is a principal program manager on the Xamarin team at Microsoft. He has been a .NET developer since 2005, working in a wide range of industries including game development, printer software, and web services. Prior to becoming a principal program manager, James was a professional mobile developer and has been crafting apps since 2011 with Xamarin. In his spare time, he is most likely cycling around Seattle or guzzling gallons of coffee at a local coffee shop. He can be found on Twitter @JamesMontemagno and blogs code regularly on his personal blog <http://www.MotzCod.es>.

Alex Mullans

Program Manager, VSTS Package Management, Microsoft



Alex Mullans is a program manager for Visual Studio Team Services working on the Package Management extension. He works on tools that help engineers spend less time managing dependencies and more time writing code. He's worked with teams across Microsoft to help them use packages as they transition to VSTS Git, Team Build, and other parts of the Microsoft "One Engineering System." @alexmullans

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 at blogs.tedneward.com.

CONFERENCE SPEAKERS (continued)

Oren Novotny

Principal Architect, BlueMetal



Oren Novotny is a principal architect at BlueMetal Architects. He is passionate about reducing friction in the development process and helping other developers create portable cross-platform applications using .NET. He was 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 and 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 technology is meaningless in a vacuum and strives to show how the bleeding-edge delivers superior value to the clients' bottom line. @onovotny

“WELL STRUCTURED AND ORGANIZED, GREAT SPEAKERS. THEY WERE MOTIVATED AND MOST KNEW HOW TO PRESENT WELL AND KEEP OUR ATTENTION. THE CONTENT WAS SPECTACULAR AND I LEFT WANTING TO INCORPORATE WHAT I LEARNED.”

– Billy Nieto, Hyster-Yale Group

Brian Noyes

CTO & Co-founder, Solliance



Brian Noyes is CTO and Co-founder at Solliance (www.solliance.net), an expert technology solutions development company. Brian is a Microsoft Regional Director, Microsoft MVP, and Pluralsight author. Brian specializes in web, desktop, and mobile full-stack architecture and Microsoft Azure services. He is a frequent top rated speaker at developer conferences worldwide, including VSLive!, DEVIntersection, DevTeach, and others. Brian has authored several books including Developer's Guide to Microsoft Prism 4, Data Binding with Windows Forms 2.0, and Smart Client Deployment with ClickOnce. Brian has a series of technical courses available at Pluralsight covering a wide range of modern web, desktop, and web services technologies. Brian got started programming as a hobby while flying F-14 Tomcats in the U.S. Navy, later turning his passion for software into his current career. You can follow Brian through his blog at <http://briannoyes.com> and Twitter @briannoyes.

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

Adam Tuliper

Principal Software Engineer, Microsoft



Adam is a principal software engineer for Microsoft's Developer Experience division (DX). Adam lives in Southern California and helps others realize their technical vision across the web, gaming, cloud, phone, console, and desktop platforms. He is heavily addicted to his HoloLens, .NET Core, bots, Unity, and most .NET based technologies. He co-runs the Orange County Unity meetup. Prior to Microsoft, he worked as a software architect in defense, finance, pharmaceutical, manufacturing, technology, and public sector fields for more than 20 years. He presents nationwide at conferences such as //build & GDC, loves speaking at user groups and universities, is a pluralsight.com author and an MSDN Magazine author. Catch him on twitter @AdamTuliper.

Kasey Uhlenhuth

Program Manager, .NET Managed Languages Team, Microsoft



Kasey is a program manager on the .NET Managed Languages team at Microsoft. She is currently working on improving .NET developer productivity. Previously, she worked on C# Interactive and Node.js Tools for Visual Studio. @kuhlenhuth

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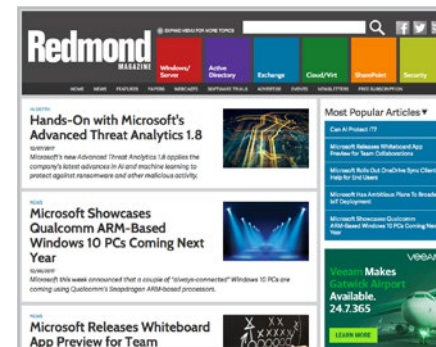
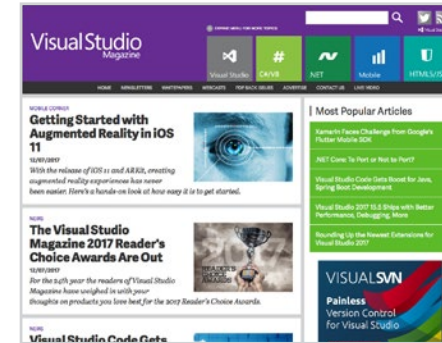
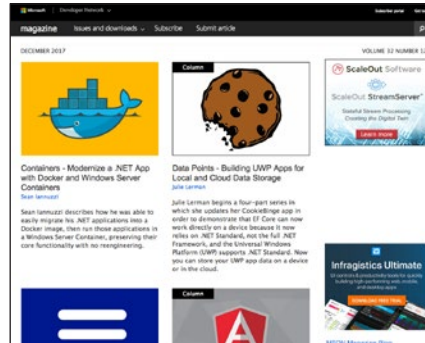
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– Brian Mogged, Hanley Wood Marketing

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Add the Hotel package to your 5-Day Conference Package

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Add the Hotel package to your 3-Day Conference Package
The Visual Studio Live! Las Vegas 3-Day Hotel Package includes four nights at Bally's Resort Las Vegas (Room and tax only)—*available Monday night (March 12) through Thursday night (March 15), departing Friday (March 16).*

3-DAY HOTEL PACKAGE: \$650

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– Anthony Ramirez, Hallmark Cards, Inc.

REGISTRATION PACKAGES (continued)

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	\$595	\$595	\$645	\$695

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The Visual Studio Live! Las Vegas Workshop Pass grants you access to one full-day workshop on Monday, March 12, 2018 OR Friday, March 16, 2018.	STANDARD PRICING THROUGH DECEMBER 15, 2017:
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GROUP DISCOUNTS are available for companies who bring 3 or more people.

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For questions regarding group registration of 10 or more or for more information please call 972.304.5380.

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NETWORKING WITH OTHER DEVELOPERS TO
UNDERSTAND WHAT THEY ARE USING AND WHY."**

– Sunil Anthony, MFRMLS

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ENJOY THESE SPECIAL RATES TO THE EVENT.

VISUAL STUDIO LIVE! ALUMNI 5-DAY CONFERENCE PACKAGE

The Visual Studio Live! Las Vegas Alumni 5-Day Package is your five day all-access pass to every keynote, session, workshop and event March 12-16, 2018.	YEAR-END SPECIAL PRICING THROUGH DECEMBER 15, 2017	SUPER BIRD PRICING THROUGH JANUARY 19, 2018	EARLY BIRD PRICING THROUGH FEBRUARY 16, 2018	STANDARD PRICING THROUGH MARCH 12, 2018
	\$1,595	\$1,695	\$1,795	\$2,095

Add the Hotel package to your 5-Day Conference Package

The Visual Studio Live! Las Vegas 5-Day Hotel Package includes five nights at the Bally's Resort Las Vegas (Room and tax only)—*available Sunday night (March 11) through Thursday night (March 15), departing Friday (March 16).*

5-DAY HOTEL PACKAGE: \$775