







**CONNECT WITH VISUAL STUDIO LIVE!** 

#vslive







# **TOPICS INCLUDE:**



ALM / DevOps



**ASP.NET** 



Cloud Computing



**Database and Analytics** 



**JavaScript** 



**Native Client** 



**Software Practices** 



**Visual Studio /** .NET Framework



**Web Client** 



**Web Server** 



Windows













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# A MESSAGE FROM THE CONFERENCE CO-CHAIRS

**WASHINGTON, D.C.** 

**SOFTWARE DEVELOPMENT CHANGES ALMOST EVERY DAY,** with amazing new tools and technologies in the cloud, on mobile devices, the Web at large, and on operating systems from Windows to macOS and Linux. While rapid change can feel threatening, we think there's never been a better time to be a software developer—but to be a "rock star" at your craft, you'll need to have a good educational source that builds your skills.

# **VISUAL STUDIO LIVE! 2017 IS INSPIRED BY ROCK AND ROLL. AND ALL THAT IS HAPPENING IN TECH.**

We want to help you master what's new, even as it is gushing out of the firehose! We think there's a great way to digest these changes and seize their collective opportunity, and that's to hear about them directly from the finest expert speakers in the business.

We're Andrew Brust, Rockford Lhotka, and Brian Randell, and as Conference Co-Chairs for Visual Studio Live! Washington, D.C., we'd like to personally invite you to do that by joining us this June at the Marriott Marquis in Washington, D.C. We've put together an amazing lineup of sessions on: Web Server (including ASP.NET Core), Web Client (HTML5, JavaScript, Angular, and the like), Native Client (mobile and desktop), ALM and DevOps, Database and Analytics, Azure / Cloud Computing, Software Practices, and more.

We've also got coverage on technologies like Microsoft Visual Studio 2017 / full .NET and .NET Core, Single Page Web Apps, Xamarin, Electron and Cordova. Then there's our workshop content, covering ASP.NET DevOps, Cross-Platform Distributed Application Architecture, and SQL Server 2016 for developers. These sessions and workshops drill deep into the new subjects you need to master and the fundamentals that are always important.

Microsoft and its developer technologies are poised to move into the future, and you've got to keep up with the changes. At such a pivotal time, Internet-based content isn't enough. Find a way to get to Visual Studio Live! Washington, D.C. and get live content and interaction with independent experts. Your career deserves nothing less.

WE HOPE TO SEE YOU THERE! ROCK OUT!

VISUAL STUDIO LIVEI CONFERENCE CO-CHAIRS



**Andrew Brust** Senior Director, Market Strategy and Intelligence, Datameer



Rockford Lhotka CTO, Magenic



Brian A. Randell Partner, MCW Technologies





**TAKE THE CODE TRAIN.** The nation's capital is home to Duke Ellington and the next stop on our 2017 "Code Tour". Swing into training on the hottest topics with us in D.C. in June.

A TRUSTED SOURCE SINCE 1993. We

take pride in the fact that the Developer Community has come to us for the best in developer-focused education and training for over 20 years.

# WE ARE VISUAL STUDIO LIVE!

Visual Studio 2017 is an exciting release with new editions with tons of new features, not to mention Microsoft's exciting venture into more open source and cross-platform development. We'll give you the information you need to understand and leverage the power of .NET, Visual Studio, ALM, and VSO today and into the future.

JAZZ IT UP WITH NEW
FRIENDS. Developers, engineers, software architects and designers will all be at the conference from around the world—take advantage of the meals and networking events to get to know

DECISIONS, DECISIONS. With over

your colleagues.

60 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!

TIP YOUR HAT TO SAVINGS. Get 4 days of developer-focused education for a great price! Plus, the earlier you register, the more you save!

WE LIKE WELL-ROUNDED CODE. We want you to learn about the most recent software and industry updates from every angle. That's why you'll get to hear from both unbiased industry experts and Microsoft insiders at your sessions.

MEET THE BAND LEADERS. What separates 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.

9
JOIN US EARLY FOR OPENING WORKSHOPS.

Check out our all day preconference workshops on App Architecture, SQL Server 2016 and ASP.NET DevOps.



THE HOTTEST LINE-UP.
We offer 4 full days of educational sessions on hot topics like .NET, ASP.NET, AngularJS, WebAPI, ALM, Visual Studio 2017, SQL Server, and more!



# THE FUN STUFF:

# **VISUAL STUDIO LIVE! WASHINGTON, D.C. EVENTS**

YOUR ATTENDANCE AT VISUAL STUDIO LIVE! (VSLIVE!™) WASHINGTON, D.C. 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, June 12 6:45pm - 9:00pm

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 the Washington, D.C. area. 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.

### **WELCOME RECEPTION**

Tuesday, June 13 4:15 - 5:30pm

All conference attendees are invited to celebrate the start of Visual Studio Live! Washington, D.C. at the Welcome Reception. Join us 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, June 14 12:00 - 1:30pm

Plumb the knowledge and experience of your colleagues, conference speakers and exhibitors by participating in one of the BoF Tables discussions. 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 speakers' name. Join your favorite speaker for a lunchtime discussion or just to ask questions or clarify anything from their sessions.







# Monuments by Moonlight Tour

Wednesday, June 14 6:45 - 10:30pm

Pre-registration & \$20 Confirmation Fee Required

Join Visual Studio Live!'s Monuments by Moonlight Tour and see the best of our nation's capital as it is illuminated at night! The tour will view the White House, the Washington Monument, and the Smithsonian Institution Museums that adorn the National Mall. Participants will also be able to walk onto the National Mall and experience the World War II Memorial, the Lincoln Memorial, the Vietnam Veteran's Memorial, and the Jefferson Memorial, time permitting. You'll see the city in a whole new light on this 3-hour tour led by a tour guide.

Space is limited and reservations will be on a first come, first serve basis.









# **AGENDA AT-A-GLANCE**

ALM / DevOps

Cloud Computing

Database and Analytics

Native Client

**Software Practices** 

Visual Studio / .NET Framework

**Web Client** 

**Web Server** 

START TIME	END TIME	Visual Studio Live! Pre-Conference Workshops: Monday, June 12, 2017 (Separate entry fee required)			
7:30 AM	9:00 AM	Pre-Conference Workshop Registration • Coffee and Morning Pastries			
9:00 AM	6:00 PM	<b>M01</b> Workshop: Distributed Cross-Platform Application Architecture - Jason Bock & Rockford Lhotka	<b>M02</b> Workshop: Practical ASP.NET DevOps with VSTS or TFS - Brian Randell	M03 Workshop: SQL Server 2016 for Developers - Andrew Brust & Leonard Lobel	
6:45 PM	9:00 PM	Dine-A-Round			

START TIME	END TIME	Visual Studio Live! Day 1: Tuesday, June 13, 2017			
7:00 AM	8:00 AM	Registration - Coffee and Morning Pastries			
8:00 AM	9:00 AM	KEYNOTE: To Be Announced, Saurabh Pant, Program Manager, Microsoft			
9:15 AM	10:30 AM	T01 Go Mobile With C#, Visual Studio, and Xamarin - Kevin Ford  T02 Build Better JavaScript Apps with TypeScript - Brian Noyes  T03 What's New in Azure laaS v2 - Eric D. Boyd		<b>T04</b> Tactical DevOps with VSTS - Brian Randell	
10:45 AM	12:00 PM	<b>T05</b> Conquer the Network— Making Resilient and Responsive Connected Mobile C# Apps - Roy Cornelissen	<b>T06</b> Getting Started with Aurelia - Brian Noyes	<b>T07</b> Cloud Oriented Programming - <i>Vishwas Lele</i>	<b>T08</b> PowerShell for Developers - Brian Randell
12:00 PM	1:30 PM	Lunch - Visit Exhibitors			
1:30 PM	2:45 PM	<b>T09</b> Lessons Learned from Real World Xamarin.Forms Projects - Nick Landry	T10 Getting to the Core of .NET Core - Adam Tuliper  T11 To Be Announced		<b>T12</b> New SQL Server 2016 Security Features for Developers - Leonard Lobel
3:00 PM	4:15 PM	<b>T13</b> Xamarin vs. Cordova - Sahil Malik	<b>T14</b> Assembling the Web— A Tour of WebAssembly - Jason Bock	<b>T15</b> Go Serverless with Azure Functions - Eric D. Boyd	<b>T16</b> No Schema, No Problem! Introduction to Azure DocumentDB - Leonard Lobel
4:15 PM	5:30 PM	Welcome Reception			

Sessions and speakers subject to change.



# **AGENDA AT-A-GLANCE** (continued)

ALM / DevOps

Cloud Computing

Database and Analytics

Native Client

**Software Practices** 

Visual Studio / .NET Framework

**Web Client** 

**Web Server** 

START TIME	END TIME	Visual Studio Live! Day 2: Wednesday, June 14, 2017			
7:30 AM	8:00 AM	Registration - Coffee and Morning Pastries			
8:00 AM	9:15 AM	<b>W01</b> To Be Announced	<b>W02</b> Creating Reactive Applications With SignalR - Jason Bock	<b>W03</b> Bots are the New Apps: Building Bots with ASP.NET WebAPI & Language Understanding - Nick Landry	<b>W04</b> What's New in Visual Studio 2017 - Robert Green
9:30 AM	10:45 AM	<b>W05</b> Write Once Run Everywhere, Cordova, Electron, and Angular2 - Sahil Malik	octron, and Angular2 Microsoft ASP.NET Core 1.0 WU/ Exploring C# / New		<b>W08</b> Get Started with Git and GitHub - Robert Green
11:00 AM	12:00 PM	GENERAL SESSION: To Be Announced			
12:00 PM	1:30 PM		Birds-of-a-Feather Lu	nch - Visit Exhibitors	
1:30 PM	2:45 PM	<b>W09</b> Distributed Architecture: Microservices and Messaging - Rockford Lhotka	<b>W10</b> Angular 101: Part 1 - Deborah Kurata	<b>W11</b> A Busy Developer's Intro to Windows Containers - Vishwas Lele	<b>W12</b> Continuous Delivery 3.0, The Next Step - Marcel de Vries
3:00 PM	4:15 PM	<b>W13</b> Agile Failures: Stories From The Trenches - Philip Japikse	<b>W14</b> Angular 101: Part 2 - Deborah Kurata	<b>W15</b> Use Docker to Develop, Build and Deploy Applications, a Primer - Mark Rosenberg	<b>W16</b> Mobile DevOps Demystified with Xamarin, VSTS and HockeyApp - Roy Cornelissen
4:30 PM	5:45 PM	<b>W17</b> Top 10 Ways to Go from Good to Great Scrum Master - Benjamin Day	<b>W18</b> SASS and CSS for Developers - Robert Boedigheimer	<b>W19</b> Microservices with Azure Container Service & Service Fabric - <i>Vishwas Lele</i>	<b>W20</b> A/B Testing, Canary Releases and Dark Launching, Implementing Continuous Delivery on Azure - Marcel de Vries
6:45 PM	10:30 PM	Visual Studio Live! Monuments by Moonlight Tour			

Sessions and speakers subject to change.

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# **AGENDA AT-A-GLANCE** (continued)

ALM / DevOps

Cloud Computing **Database and** Analytics

**Native** Client

**Software Practices** 

Visual Studio / .NET Framework

**Web Client** 

**Web Server** 

START TIME	END TIME	Visual Studio Live! Day 3: Thursday, June 15, 2017			
7:30 AM	8:00 AM	Registration - Coffee and Morning Pastries			
8:00 AM	9:15 AM	<b>TH01</b> Let's Write a Windows 10 App: A Basic Introduction to Universal Apps - Billy Hollis	<b>TH02</b> JavaScript for the C# (and Java) Developer - Philip Japikse	<b>TH03</b> Entity Framework Core for Enterprise Applications - Benjamin Day	<b>TH04</b> Overcoming the Challenges of Mobile Development in the Enterprise - Roy Cornelissen
9:30 AM	10:45 AM	<b>TH05</b> Implementing the MVVM Pattern in Your Xamarin Apps - Kevin Ford	TH06 Integrating AngularJS  & ASP.NET MVC  - Miguel Castro  TH07 Power BI: Analytics for Desktop, Mobile and Cloud  - Andrew Brust		<b>TH08</b> Exploring Microservices in a Microsoft Landscape - Marcel de Vries
11:00 AM	12:15 PM	<b>TH09</b> Building Cross-Platform Business Apps with CSLA. NET - Rockford Lhotka	<b>TH10</b> Debugging Your Website with Fiddler and Chrome Developer Tools - Robert Boedigheimer	<b>TH11</b> Big Data with Hadoop, Spark and Azure HDInsight - Andrew Brust	<b>TH12</b> End-to-End Dependency Injection & Testable Code - <i>Miguel Castro</i>
12:15 PM	1:15 PM	Lunch			
1:15 PM	2:30 PM	<b>TH13</b> Creating Great Looking Android Applications Using Material Design - Kevin Ford	<b>TH14</b> Building Single Page Web Applications Using Aurelia.js and the MVVM Pattern - Ben Hoelting	<b>TH15</b> Using Cognitive Services in Business Applications - Michael Washington	<b>TH16</b> Extend and Customize the Visual Studio Environment - Walt Ritscher
2:45 PM	4:00 PM	<b>TH17</b> Take the Tests: Can You Evaluate Good and Bad Designs? - Billy Hollis	<b>TH18</b> Tools for Modern Web Development - Ben Hoelting	<b>TH19</b> Introduction to Azure Machine Learning Studio (for the Non-Data Scientist) - Michael Washington	<b>TH20</b> Windows Package Management with NuGet and Chocolatey - Walt Ritscher

Sessions and speakers subject to change.

# PRE-CONFERENCE WORKSHOPS

# MONDAY, JUNE 12, 9:00am - 6:00pm

Choose from a range of content and topics by expert presenters with Visual Studio Live! Washington, D.C.'s Pre-Conference full day workshops.

# **M01** Workshop: Distributed Cross-Platform Application Architecture

Intermediate

Visual Studio (LIVE)

#### JASON BOCK & ROCKFORD LHOTKA

When it comes to software architecture and development, distributed computing is both a pressing development concern and an 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.

"LEARNED NEW TECHNOLOGIES AND BEST PRACTICES, PLUS I IMPROVED MY SKILLS. GREAT SPEAKERS WITH GOOD KNOWLEDGE. ALL TOPICS WERE VERY ENCOURAGING AND MOTIVATING TO TRY AND LEARN IN OUR OWN TIME. I FOUND SOME GOOD MENTORS TO FOLLOW."

- Amarvir Brar, UPS

# **M02** Workshop: Practical ASP.NET DevOps with VSTS or TFS

Intermediate

#### **BRIAN RANDELL**

DevOps is the union of people, process, and product coming together to provide continuous delivery of value. Implementing a DevOps practice in your organization is a complex multi-step process. Assuming you get organizational buy-in and your team is ready to go, how can you implement it practically if you're committed to building high quality ASP.NET applications? How can you use either Visual Studio Team Services (VSTS) or Team Foundation Server (TFS) 2017 to create an effective release pipeline?

This workshop will show you how to use Visual Studio 2017, ASP.NET, either VSTS or TFS 2017 create an effective, automated pipeline. The day will be broken down into five sections:

- Level Set
- Plan & Track
- Develop & Test
- Release
- Monitor & Learn

The workshop starts by level-setting everyone on terms and technology. Then you'll explore four phases where development and operations can come together around the process of getting—and keeping—an ASP.NET application running smoothly. By the end of the day, you'll have seen how to start with just code and end up with a fully functioning continuous delivery pipeline running either on a local TFS installation or in the cloud with VSTS.

#### You will learn:

- How choose VSTS or TFS for your team's toolset
- How to use the tools to increase cross-team communication
- How to build quality into every phase of your pipeline

# **M03** Workshop: SQL Server 2016 for Developers

Intermediate

#### **ANDREW BRUST & LEONARD LOBEL**

This full-day workshop will get you up to speed on powerful features for developers in SQL Server 2016. You'll rip through the most important SQL Server features for developers in this intensive demo-packed tour. You'll begin with the many enhancements made to T-SQL, starting with SQL Server's powerful windowing features. You'll learn how to leverage windowing with the OVER clause to calculate running and sliding aggregations, row lookups, and percentiles based on rank. You'll also explore other T-SQL enhancements, including new functions (all 22 of them), improved error handling with THROW, server-side paging with OFFSET/FETCH NEXT, sequence generators, and metadata discovery techniques.

You'll cover the latest features added in SQL Server 2016, including new security features such as dynamic data masking, row-level security, and always encrypted. Other innovative capabilities include "stretch" database (to allow select tables in an on-premises database to be transparently relocated in Azure SQL Database), temporal data (that allows "time travel" to access data as it existed at any point in time), and integrated JSON support. You'll also learn about QueryStore (maintain





# PRE-CONFERENCE WORKSHOPS (continued)

MONDAY, JUNE 12, 9:00am - 6:00pm

query plan history and performance data) and R integration (an open source data science language).

Then you'll look at the Big Data and analytics capabilities of SQL Server and the Microsoft data stack. You'll see how columnstore indexers can make a huge difference in your data warehouse-style queries, and how to ensure columnstore indexes are being invoked when you intend. You'll learn about Apache Hadoop, HDInsight (Microsoft's cloud implementation of Hadoop) and the PolyBase technology in SQL Server 2016 that lets you guery Hadoop using T-SQL. The workshop will also cover basic data warehouse concepts, the fundamentals of Power BI, and the capabilities of SQL Server components like Integration Services, Analysis Services, Master Data Services, Data Quality Services, and Analytics Platform System (APS), and you'll see what's new in SQL Server 2016 Reporting Services.

To wrap up, you'll examine the "beyond relational" features that will get you thinking outside the box with respect to the types of data that can be managed by a relational database system. Learn how to use the hierarchyid data type to cast a hierarchical structure over any relational table. Dig into FILESTREAM and FileTable and learn how you can finally enjoy the native ability to store large binary objects in the file system transparently, and with full transactional capabilities. The geospatial data types enable you to integrate location-intelligence into the database, and you'll finish up by building several location-aware applications on top of these new data types. You'll learn a ton of new SQL Server features in this information-packed day.

#### You will learn:

- About windowing, other T-SQL programming enhancements, and the latest new features in SQL Server 2016
- About the Big Data and analytics capabilities in SQL Server, Power BI and HDInsight, including enhancements to Reporting Services
- · About unstructured data storage, including native file streaming, and the hierarchical and geospatial data types



"WHAT I LIKED BEST WAS THE LEVEL OF KNOWLEDGE OF THE **SPEAKERS AND THEIR ABILITY** TO SHARE INFORMATION IN AN **INFORMATIVE WAY."** 

- Timothy Williams, New Standard Corp.





# SESSION DESCRIPTIONS BY TRACK

# ALM / DevOps



Shipping high quality software may be a team sport, but doing so requires something akin to herding cats. From process management to the mechanics

of automation, you need to get people, process, and tools working in harmony. Good Application Lifecycle Management practices are challenging. Add the fact business demands more from teams, more quickly, and it's clear that we as an industry need to evolve. DevOps continues to be the hot buzzword but what does it mean and how do you bring it to your organization? How to do you implement it with your team?

In this track, we have a range of sessions to help you build software that has greater quality and can be delivered continuously if your users need it. You'll find coverage of:

- DevOps with VSTS
- PowerShell for Developers
- Getting Started with Git and GitHub
- Continuous Delivery
- Mobile DevOps with Xamarin, VSTS, and HockeyApp
- Overcoming the Challenges of Mobile Development in the Enterprise
- A/B Testing, Canary Releases and Dark Launching on Azure

# **T04** Tactical DevOps with VSTS

Introductory

**BRIAN RANDELL** 

Tuesday, June 13, 9:15 – 10:30am

Come and spend 75 minutes digging into Visual Studio Team Services with Visual Studio 2017. No theory—just a practical drill down into the latest features you can use to take a .NET Core Web Application and get a full DevOps pipeline working on either Windows or Linux.

This session will cover:

- Storing code in a private Git repos
- Tracking work using the Scrum Template
- Creating a build that runs unit tests
- Creating a release that runs deployment tests
- Adding analytics so you know how your site is performing

#### You will learn:

- How to create a .NET Core Web Application
- How to manage the app development process
- How to create a practical DevOps pipeline

# **T08** PowerShell for Developers

Introductory

**BRIAN RANDELL** 

Tuesday, June 13, 10:45am - 12:00pm

PowerShell is the lingua franca of DevOps on Windows and Azure. Yes, there's that word again—DevOps. Like or it or not, 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 and Desired State Configuration.

#### You will learn:

- How to configure your PowerShell environment
- How to use PowerShell quickly and efficiently
- All about the PowerShell "gotchas"

### W08 Get Started with Git and GitHub

Introductory / Intermediate

ROBERT GREEN

Wednesday, June 14, 9:30 - 10:45am

Git is a free, open source distributed version control system. It has become wildly popular as a way to not only manage source code, but also share code with others. This session will cover the basics of using Git. You will become familiar with repos, committing changes, branching and merging. You'll see how to work with both new and existing projects, how to store vour code in both GitHub and Visual Studio Team Services and how to work with Git in Visual Studio and Visual Studio Code.

#### You will learn:

- What Git is and how to get started using it
- The basics of Git, including repos, committing changes, branching and merging
- · How to use Git with GitHub, VSTS, Visual Studio and Visual Studio Code

# W12 Continuous Delivery 3.0, The Next Step

Introductory / Intermediate

MARCEL DE VRIES

Wednesday, June 14, 1:30 - 2:45pm

Digital disruption is happening all around you. In order to deal with that, you need to digitally transform your organization, your processes and tools. The introduction of Agile and Scrum for development teams meant a radical change in the way you develop software. The bottleneck of delivering software on time and budget is no longer the software development teams, but software delivery. Being able to ship the finished increment on demand was



the next big step. Many companies are already busy with implementing Continuous Delivery, but in many cases it's only a sub-optimization of the process and tools already in place. Is this the way to really make the difference? Continuous Delivery 3.0 means a different look at your ALM process and software development. Re-invent your software development process and use state-of-the-art tooling and technology to make this happen. This session will discuss the traditional approach to continuous delivery and look at how to change your way of thinking and behavior to drive the next breakthrough into faster and reliable delivery.

#### You will learn:

Visual Studio (LIVE)

- How we traditionally approach continuous delivery
- How our standard way of thinking results in improved but suboptimal processes
- · How we can unlock different behavior and thinking
- · How new emerging technologies can help you take the next step

# W16 Mobile DevOps Demystified with Xamarin, VSTS and HockeyApp

Intermediate

#### **ROY CORNELISSEN**

Wednesday, June 14, 3:00 – 4:15pm

DevOps has become a popular means for repeatable and agile delivery of high quality applications. For services and web applications, you're already becoming accustomed to incorporating DevOps practices in your day-to-day job in the enterprise.

Mobile apps bring a set of extra challenges to the table when it comes to DevOps. This session will take you through these new challenges and show how you, as a C# developer, can leverage a combination of the Xamarin platform, Visual Studio Team Services, and HockeyApp to implement a DevOps Continuous Delivery pipeline for mobile apps on all platforms.

#### You will learn:

- About the unique challenges mobile apps bring to DevOps practices
- About the why's and how's of testing mobile apps and gathering user feedback
- How to implement a Continuous Delivery pipeline with Xamarin, VSTS and HockeyApp

# **W20** A/B Testing, Canary Releases and Dark Launching, Implementing **Continuous Delivery on Azure**

Introductory / Intermediate

#### **MARCEL DE VRIES**

Wednesday, June 14, 4:30 - 5:45pm

Continuous delivery strives to deliver features on demand any time they're needed. This is challenging if you run an operation that needs to be available 24x7. This session will look at different technologies available to separate feature deployments from feature exposure, making it possible to make releasing a feature to the end user nothing more than the flip of a switch. You'll examine how to use the different technologies like feature toggles and traffic management to implement continuous delivery release techniques like A/B Testing, Canary releases and dark launching.

#### You will learn:

- About working with Feature toggles instead of a
- About using Microsoft release manager
- About using Traffic Management and Deployment slots to create a canary release or a dark launch

# **TH04** Overcoming the Challenges of **Mobile Development in the Enterprise**

Introductory / Intermediate

### **ROY CORNELISSEN**

Thursday, June 15, 8:00 - 9:15am

Mobility has taken a real flight in recent years and is also becoming prevalent throughout the enterprise. Suddenly organizations are faced with many choices, ranging from which devices and platforms to support, managing 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. Building cross platform applications with Xamarin in combination with Enterprise Mobility Management platforms can lead to many pitfalls you will learn about.

#### You will learn:

- About building enterprise mobile apps for multiple platforms, patterns for integrating with legacy back office systems, and having to deal with rolling out their 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

# **Cloud Computing**



A growing number of IT practitioners believe the future of application development is service-based and in the cloud. Cloud computing offers flexibility,

scalability, and a less expensive way to host 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:

- What's New in Azure laaS v2
- Cloud-Oriented Programming
- Microservices with Azure Container Service & Service Fabric
- Azure Functions
- Bots, ASP.NET and Language Understanding
- Introduction to Docker
- Windows Containers

## T03 What's New in Azure laaS v2

Introductory / Intermediate

ERIC D. BOYD

Tuesday, June 13, 9:15 - 10:30am

If you've been working with Azure Infrastructure Services for a while, you're probably familiar with virtual machines running within the boundary of a cloud service. You're probably using Affinity Groups and the imperative Service Management API—whether you call it directly, use the Classic Azure Management Portal, or PowerShell. However, there's a new Azure in town with a new Management

Portal. This new Azure has different management APIs powered by Azure Resource Manager and a new set of Infrastructure Services known as JaaS v2.

This session will introduce you to what's new in Azure laaS v2, from the new service architecture, new resources and capabilities to the Azure Resource Manager. You'll also learn how to migrate your existing laaS v1 resources and some of the transition challenges you may encounter.

#### You will learn:

- All about Azure laaS v2
- How to work with laaS v2 using ARM
- Migration strategies and transition challenges

# **T07** Cloud Oriented Programming

Intermediate

**VISHWAS LELE** 

Tuesday, June 13, 10:45am - 12:00pm

The public cloud is tomorrow's IT backbone. As cloud vendors introduce new capabilities, the applicationbuilding process is going through a profound transformation. The cloud is based on the key tenets of commodity hardware, usage-based billing, scale-out, and automation—all on a global scale. So how does the cloud affect what you do as a developer every day? What do you need to do at the code level that aligns you with the aforementioned tenets? This session will go over tips and tricks designed to help you make more effective use of the cloud.

### You will learn:

- About the cloud tenets: global scale, commodity hardware, usage-based billing, scale-out, and automation
- How the cloud impacts what you do as a programmer
- What you need to do at a program level that aligns you with those tenets

#### **T15** Go Serverless with Azure Functions

Introductory / Intermediate

ERIC D. BOYD

Tuesday, June 13, 3:00 – 4:15pm

Idle CPU cycles are wasteful, but you probably have far more computing capacity than you use. Now 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 not fully using them, you truly pay for consumption and compute cycles you use.

This session will help you understand how Microsoft is enabling serverless compute in Azure with Azure Functions. You'll learn what serverless architectures and Azure Functions are all about. You'll get an overview of how to get started developing and running serverless code. You'll also 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'll learn about the tooling and DevOps capabilities that exist for working with Functions. And finally, you'll model the pricing together to 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



# W03 Bots are the New Apps: Building **Bots with ASP.NET WebAPI & Language Understanding**

Intermediate / Advanced

Visual Studio LIVE

**NICK LANDRY** 

Wednesday, June 14, 8:00 - 9:15am

Bots (or conversation agents) are rapidly becoming an integral part of your users' digital experience. They're as vital a way for users to interact with a service or application as a web site or mobile experience. Developers writing bots all face the same problems. Bots require basic I/O, they must have language and dialog skills, and they must connect to users—preferably in any conversation experience and language the user chooses. This session will show you how to build and connect intelligent bots to naturally interact with your users; from wherever they are and from text/SMS to Skype, Slack, Facebook, e-mail and other popular services. You'll explore the Microsoft Bot Framework, which provides what you need to build and connect intelligent bots that interact naturally wherever your users are talking. Live demos will cover the Bot Connector in the cloud, the Bot Build SDK with ASP. NET WebAPI & C# (Node.is is also supported) and how to handle natural language input from the user with the Language Understanding Intelligent Service (LUIS) from Microsoft Cognitive Services. Every business needs bots to provide a more personal experience to its users and customers. Come learn how you can build your own bots in just a few hours.

#### You will learn:

- About the role of bots and conversation agents in various business scenarios
- The fundamentals of the Bot Framework, including the Bot Connector, the Bot Builder SDK and Language Understanding Intelligent Service (LUIS) from Microsoft **Cognitive Services**
- How to get started with building simple intelligent bots that support natural language and can interact via the web, Skype, Slack, texting and other channels

# W11 A Busy Developer's Intro to **Windows Containers**

Introductory

**VISHWAS LELE** 

Wednesday, June 14, 1:30 - 2:45pm

You hear a lot about containers these days. Come to this session to learn what containers are, why they are so important, how they work in Windows Server, and they integrate with Docker.

#### You will learn:

- About Docker essentials and why developers should care about them
- How you can prepare your apps, and how to architect your apps to work with Containers
- How Docker Compose and Docker Swarm work and show how to build, test, diagnose, and deploy .NET apps with Windows Server containers

# W15 Use Docker to Develop, Build and **Deploy Applications, a Primer**

Introductory

MARK ROSENBERG

Wednesday, June 14, 3:00 – 4:15pm

You want to develop, build and deploy your app in containers, but where do you start? What development workflows would you use? What if you want to target Linux and/or Windows? Using Visual Studio as a local development environment targeting both Windows Containers and Linux, you'll see demos of developing in a container, continuous integration and deployment with Visual Studio Team Services, and then deploying applications to the Azure Container Service.

#### You will learn:

- How to use docker in the development pipeline
- How to target Windows and Linux in docker
- How to deploy an application to the Azure Container Service

# W19 Microservices with Azure **Container Service & Service Fabric**

Intermediate

VISHWAS LELE

Wednesday, June 14, 4:30 - 5:45pm

Many are increasingly seeing microservices as the architectural style of choice, especially when it comes to building cloud-based applications. This session will examine the key tenets of microservices. Then you'll switch to practically applying these concepts to two related Azure Services—Azure Container Service and Azure Service Fabric.

"THE WIDE VARIETY OF **SESSIONS WAS GREAT** AND INTRODUCED ME TO **TECHNOLOGIES OR EVEN APPROACHES TO SOLUTIONS** THAT HAD NOT OCCURRED TO **ME. I PERSONALLY ENJOYED** THE WINDOWS IOT AND SIGNALR **COURSES; AS THEY SHOWED HOW A SOFTWARE DEVELOPER COULD INTERFACE WITH OR IMPACT THE PHYSICAL WORLD IN REAL TIME!"** 

- John Black, CGI Federal



# **Database and Analytics**



SQL Server 2016 is here. NoSQL databases are here too. Then there's Big Data and data lakes. And meanwhile, the fundamentals of .NET data app

development are still important, especially now that .NET Core is here. 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:

- Entity Framework Core for Enterprise Applications
- DocumentDB
- A Tour of SQL Server 2016 Security Features
- Power BI for Desktop, Mobile, and Cloud
- Big Data with Hadoop, Spark, and Azure **HDInsight**
- Cognitive Services
- Azure Machine Learning

# **T12** New SQL Server 2016 Security **Features for Developers**

Intermediate

#### LEONARD LOBEL

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

With the release of SQL Server 2016, the database engine has been greatly enhanced for security, with three new features you'll learn about in this demo-packed session. With dynamic data masking (DDM), you can fully or partially conceal sensitive columns from guery results. Masking does not modify data on in the table, it simply hides data from users that don't have access permission. Row-level security (RLS) also hides data from unauthorized users, but at the row level. With RLS, you can create your

own security policy to control which users can read or write specific rows in the table. Finally, Always Encrypted (AE) uses client-side encryption to ensure data is encrypted in flight, not just at rest. Furthermore, the encryption keys are accessible only to the client. This guarantees that data cannot be decrypted on the server, easing the migration path to the cloud for users with highly sensitive data.

#### You will learn:

**WASHINGTON, D.C.** 

- How dynamic data masking (DDM) can hide sensitive columns from un-authorized users
- About row-level security (RLS) to filter or block individual rows from different users
- · About Always Encrypted (AE), a new client-side database encryption technology available in SQL Server 2016

# **T16** No Schema. No Problem! **Introduction to Azure DocumentDB**

Introductory

#### LEONARD LOBEL

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

Like other NoSQL platforms, Azure DocumentDB supports a schema-free data model, uses replicas for fast write performance, and scales easily. DocumentDB also offers several unique features that make it a compelling candidate for NoSQL scenarios. This session will present an overview of Azure DocumentDB, a new massively-scalable and fully managed NoSQL database platform designed specifically for modern web and mobile applications.

The session starts with a detailed explanation of NoSQL and document databases in general, and how they compare with traditional relational database platforms. Then you'll tour the many features of DocumentDB, including rich querying with SQL (that's right, you query this NoSQL database using SQL), and client development using the REST API and the many available DocumentDB SDKs. You'll also learn about the server-side programming model that lets you write fully transactional stored procedures, triggers, and user-defined functions. You'll

also explore tunable consistency, scale-out partitioning, custom indexing, attachments, and more. Attend this session and you will get up to speed on DocumentDB.

#### You will learn:

- About NoSQL, document databases, and Microsoft Azure DocumentDB
- About the differences between NoSOL and relational database platforms, and when to choose one or the other for your next application
- About the unique NoSQL features of DocumentDB, including rich guery over schema-free data, client development, server-side programming, tunable consistency, indexing, partitioning, and attachments

# **TH03** Entity Framework Core for **Enterprise Applications**

Intermediate / Advanced

#### **BENJAMIN DAY**

Thursday, June 15, 8:00 - 9:15am

Entity relationships are becoming more complex. You're getting worried about performance problems. What do you do when your simple Entity Framework app isn't so simple anymore? Can you even use Entity Framework in a high-performance, scalable web application? This session will go beyond the simple Code First entity framework cases and get into more complex class designs and relationships. You'll learn how to handle the sticky issues around lazy-loading, concurrency, cascading deletes, occasional connectedness, and performance testing. You'll also talk strategy for DevOps, stored procedures, unit testing, and incremental deployment.

#### You will learn:

- About controlling and planning for unpredictable behaviors like lazy loading and cascading deletes
- About finding performance and concurrency problems in Entity Framework
- · Unit testing techniques





# **TH07** Power BI: Analytics for Desktop, **Mobile and Cloud**

Intermediate

**ANDREW BRUST** 

Visual Studio (LIVE)

Thursday, June 15, 9:30 - 10:45am

Power BI has become a powerhouse in the Microsoft Data Platform and a juggernaut across the industry. It offers a free cloud service, along with a professional subscription for \$10 a month. Power BI Desktop also provides massive analytics power right on your PC. And mobile devices, including those running iOS and Android, have access to Power BI cloud assets as well as on-premises SQL Server 2016 Mobile Reports. Add to the above the fact that Microsoft updates Power BI every few weeks, and there's a lot to consider. This session will bring you fully up-todate on what Power BI has to offer. You'll walk out with expertise and readiness to take it all on.

# TH11 Big Data with Hadoop, Spark and **Azure HDInsight**

Intermediate

**ANDREW BRUST** 

Thursday, June 15, 11:00am - 12:15pm

As Big Data starts to move beyond the hype cycle, Hadoop is reaching critical mass as a true enterprise computing tool. Microsoft's flavor of Hadoop, Azure HDInsight, has matured a great deal. It's now available in Linux versions, as well as its original Windows distribution. It has also added support for Apache Spark, which changes the game significantly. This session will help you learn about Hadoop and Spark, how they work, how to get them running on the Azure cloud and how to integrate them with SQL Server, Power BI and Excel.

# **TH15** Using Cognitive Services in **Business Applications**

Introductory

WASHINGTON, D.C.

MICHAEL WASHINGTON

Thursday, June 15, 1:15 - 2:30pm

This beginner-level session will teach you how to leverage Microsoft Cognitive Services to deliver application solutions. You'll learn about using the Computer Vision API for Optical Character Recognition (OCR) in a custom application. You'll also learn about using the Text Analytics API to detect important subjects in text to help custom applications perform intelligent searches. You'll use the Language Understanding Intelligent Service (LUIS) to detect user intent and respond appropriately.

#### You will learn:

- How to evaluate and estimate costs of using Cognitive
- The basics of building an application consuming the Cognitive Services APIs
- How to call and consume the Computer Vision, Text Analytics, and LUIS APIs

# **TH19** Introduction to Azure Machine **Learning Studio (for the Non-Data** Scientist)

Introductory

MICHAEL WASHINGTON

Thursday, June 15, 2:45 – 4:00pm

Machine learning can help examine large amounts of data to discern patterns. This lets you construct models to recognize those patterns. You can use these models to make predictions such as determining the price of a house or what a visitor to your website will click on next. This beginner-level session, aimed at the non-data scientist, will teach you to create predictive models using the

Azure Machine Learning Studio, deploy the models using web services, and consume the results in your custom applications.

#### You will learn:

How to prepare data and create predictive experiments

- · How to use R scripts to transform data for your experiments
- How to deploy and consume a predictive model using web services

"I REALLY VALUED THE **TRAINING, AND I LOVED SEEING SO MANY LADIES** HERE. THE MONUMENT TOUR **WAS PHENOMENAL. I ENJOYED EVERY MINUTE!"** 

- Mandie Lyons, Lowen Corporation



# **Native Client**



Native applications—whether they're on Windows, iOS or Android—are of utmost importance. Mobile apps are becoming a common vehicle to help

users interact with each other, their organizations, and their business applications. In the desktop arena, it can be easy to forget 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 both WPF technology and the newer Universal Windows Platform (UWP), which lets your apps to run on Windows 10 PCs, phones and IoT devices. This track includes coverage of the following:

This track includes:

- Building Connected and Disconnected Mobile Apps
- Building Cross-Platform Business Apps with CSLA .NET
- Xamarin and Xamarin Forms
- · Native apps with Electron, Cordova, and Angular 2
- Xamarin vs Cordova
- Window 10 Universal Apps Introduction
- MVVM with Xamarin Apps
- Material Design and Android Apps
- Good and Bad Design for UX

# T01 Go Mobile With C#, Visual Studio, and Xamarin

Introductory / Intermediate

#### **KEVIN FORD**

Tuesday, June 13, 9:15 - 10:00am

The mobile landscape continues to evolve at a rapid pace. Users expect great native experiences in the palm of their hands on each and every platform. The separate programming languages and tools to learn and maintain for each platform are a major hurdle. Even if you tackle the burden of learning Objective-C, Swift, or Java, you'll still have to manage multiple code bases. This is a nightmare for any development team. It doesn't have to be this way. You can create Android, iOS, Windows Phone, and Windows Store apps leveraging the .NET framework and everything you love about C#.

This session will teach you about Xamarin and how it can help you leverage a shared C# code base across all mobile platforms. You'll walk you through developing, designing, deploying, and optimizing your first mobile apps for iOS, Android, and Windows from a single code base. You'll even see how to share more code with Xamarin.Forms, which lets you build native UIs for iOS, Android and Windows Phone from a single, shared C# codebase. You'll walk away with the knowledge to build cross platform mobile app with C# features such as LINO, async/await, events, and delegates and inside of both Visual Studio and Xamarin Studio.

#### You will learn:

- How to apply C# and Visual Studio skills for mobile development
- About assessment tools for determining how much existing C# code can be mobilized
- About architectural best practices

# **T05** Conquer the Network— **Making Resilient and Responsive Connected Mobile C# Apps**

Intermediate

#### **ROY CORNELISSEN**

Tuesday, June 13, 10:45am – 12:00pm

Almost every mobile app you will build will be driven by data. In many cases, this data lives on a server or somewhere in the cloud. Crossing the network from a mobile device brings more challenges than you might think at first hand.

In this session, we will look at these challenges and how we can leverage some existing patterns and components to create a smooth and delightful experience for your end user. The technology will be based on Visual Studio, C# and the Xamarin platform to tackle the problems for all three major platforms at once.

#### You will learn:

- What challenges you'll face when your app fetches data from a network resource
- How you can stand on the shoulder of giants to tackle these challenges
- How you can make the experience for the end user more delightful

# **T09** Lessons Learned from Real World Xamarin.Forms Projects

Intermediate / Advanced

Visual Studio (LIVE)

**NICK LANDRY** 

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

Sometimes it's not the 101 tutorial you need to help you in your development journey, but just to talk to someone who has been there and has real world experience. What are the "gotchas," the things to avoid, or best practices others have learned to give you a leg up when implementing new technology? This session will cover realworld considerations with 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. The session also covers mobile DevOps, including source control in a crossplatform 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 before undertaking a mobile cross-platform project
- Xamarin.Forms best practices derived from real-world experience
- About the role of DevOps in mobile app development, and how to implement a successful mobile DevOps strategy

### T13 Xamarin vs. Cordova

Intermediate

SAHIL MALIK

Tuesday, June 13, 3:00 – 4:15pm

In a land far, far away, there is a battle brewing between developers. Some insist HTML will win, some insist you need native code performance. The truth is somewhere in the middle. Fortunately, you can take advantages of both approaches in the same app. This session focusses on the pros and cons of the various mobile dev choices and finishes by building an example app using both web and Xamarin leveraging the advantages of each.

#### You will learn:

- About mobile dev choices
- The pros and cons of each
- How to build an app taking advantage of the best of each choice

# **W05** Write Once Run Everywhere, Cordova, Electron, and Angular2

Intermediate

SAHIL MALIK

Wednesday, June 14, 9:30 - 10:45am

Write once run everywhere is finally a reality. JavaScript runs everywhere. And Angular2 with Typescript is designed to support multiple platforms. What's left is building a project template and framework that lets you target multiple platforms with a single codebase. This hands-on session introduces you to Cordova and electron. After that introduction, you'll build an application, written just once, that targets, iOS, Android, Universal Windows App, Windows EXE, MacOS, and Linux—with zero code rewrite.

#### You will learn:

- About Angular2 with Typescript
- About Cordova and Electron
- About reusing code to target all platforms

# **TH01** Let's Write a Windows 10 App: A Basic Introduction to Universal Apps

Introductory

**BILLY HOLLIS** 

Thursday, June 15, 8:00 – 9:15am

If you've never worked with XAML, you can expect some serious floundering when you try to write your first Windows 10 app. This session will help reduce that floundering. This session will help you learn the most important conceptual differences to writing these apps by writing a simple data-oriented app from scratch. You'll see the layout model, the basic syntax of XAML, how to use templating and the essentials of data binding in XAML. If you're working in Windows Forms, HTML, or other legacy UI technologies, this can be your entry point for Windows 10 XAML.

#### You will learn:

- About the major conceptual hurdles for moving to Windows 10 XAML
- Simple XAML syntax and how to use it to lay out your screen view
- How data binding and templating can help you create a truly modern app

# **TH05** Implementing the MVVM Pattern in Your Xamarin Apps

Intermediate

**KEVIN FORD** 

Thursday, June 15, 9:30 - 10:45am

This session looks at the MVVM pattern and how you can use it to share code across platforms to create Android, iOS and UWP applications. Using the MVVMCross framework, you'll create a sample application that uses shared view models, navigation patterns and binding to create great looking applications with native UIs. The purpose of such a structure is to formalize separation of concerns and maximize code reuse across all three platforms.

Visual Studio (IVE) WASHINGTON, D.C.

#### You will learn:

- · How to set up a cross platform application using the MVVM architecture
- Ways to implement binding on the three examined platforms: Android, iOS and UWP
- How to deal with navigation across all three platforms

# **TH09** Building Cross-Platform Business Apps with CSLA. NET

Intermediate

#### **ROCKFORD LHOTKA**

Thursday, June 15, 11:00am - 12:15pm

In today's world, you may write your smart client app in UWP, Xamarin, WPF, or even Windows Forms. In each 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.

# **TH13** Creating Great Looking Android **Applications Using Material Design**

Intermediate

#### **KEVIN FORD**

Thursday, June 15, 1:15 - 2:30pm

Android Lollipop introduced the Material Design Guidelines. These have substantially changed the appearance of Android applications. There are numerous new controls and style considerations for implementing the interfaces your designers are creating. This session

looks at the CardView, RecyclerView, styles and even Marshmallow concepts like the text selection, and look at examples in Xamarin and Java.

#### You will learn:

- About Android Material Design
- How to use the AppCompat V7 library to get at material design components
- About the practical implementation of material design controls and styles

# TH17 Take the Tests: Can You Evaluate **Good and Bad Designs?**

Introductory

#### **BILLY HOLLIS**

Thursday, June 15, 2:45 – 4:00pm

One of the best ways to learn design concepts is to look at real world examples—both good and bad—and understand what makes them tick. During this session, you'll examine some of the best examples of design tests over the last eight years. For each test, you will face a challenge, and then see how you fared with an analysis of the test and its answers

#### You will learn:

- About good and bad examples of design in software and in the real world
- How to analyze the designs and understand where they went right and wrong
- About examples that may lead to better designs in your own applications

# **Software Practices**



Every developer knows that there's more to software development than just code and tooling. The practices and techniques we use to understand and

analyze the problem space, manage interpersonal communication and conflict, and other patterns and practices are key to success.

Topics in this track include:

- Agile Failures: Stories From The Trenches
- Distributed Architecture: Microservices and Messaging
- Technical Debt
- Top 10 Ways to Go from Good to Great Scrum Master

# **W09** Distributed Architecture: **Microservices and Messaging**

Intermediate

#### **ROCKFORD LHOTKA**

Wednesday, June 14, 1:30 - 2:45pm

Building distributed systems provides great benefits in terms of reliability, scalability, deployment flexibility, decoupling of disparate services and apps, and so on. Actually realizing these benefits can be a challenge. It requires architects and developers pay a lot of attention to app and service boundaries, messaging patterns, and data ownership. This session is an architecture-focused dive into distributed systems design, including the creation of microservices, apps, and the messaging patterns used to communicate between them.





#### You will learn:

- About the challenges you'll face when trying to realize the benefits of distributed systems
- How to manage service and app boundaries to achieve practical decoupling
- About messaging patterns that are key to successful interaction across the services and apps in a distributed system

# W13 Agile Failures: Stories from The Trenches

Intermediate

PHILIP JAPIKSE

### Wednesday, June 14, 3:00 - 4:15pm

When agile first burst on the scene, there was a lot of discussion about how agile isn't just a silver bullet but the silver bullet. But is it really? Even after agile went mainstream, projects continue to fail. This session looks at a series of failed projects, examines the root causes, and the lessons learned from those failures. Fast failure and taking careful retrospective is the best way to continuously improve.

#### You will learn:

- About the most common mistakes made when transitioning to agile
- How to avoid and/or resolve those mistakes

# W17 Top 10 Ways to Go from Good to **Great Scrum Master**

Advanced

**BENJAMIN DAY** 

Wednesday, June 14, 4:30 - 5:45pm

Having the role of Scrum Master can be difficult. You live between a rock and a hard place. You're influential, but you probably don't have any real power. You're not a project manager, but you're on the hook for delivering.

You're asked to promise dates when the best you can give is a forecast. You're long on responsibility and short on power. But you do it because it's a great job, right? There's nothing like helping bring your team together to deliver actual working software.

It takes a special kind of person to be Scrum Master it requires nerves of steel, a lot of finesse, and some ridiculously great people skills. It's a lot of knowing what to look for and knowing how to fix it. It's even better if you can anticipate issues and get in front of them. What can you do to help keep everything on track? How do you have the difficult conversations when things are "suboptimal?" From that lazy guy on your team, to the product owner who doesn't like to estimate, to you losing your mind because you're always picking up the slack, how do you help your team to solve problems and really sing? You're already a good Scrum Master. Come find out how to be great.

#### You will learn:

- If you're a technically-oriented Scrum Master, how do you best help your team?
- How to find the right balance between Big-Design-Up-Front, Emergent Architecture, and suicidal reckless non-planning
- How to efficiently align teams with products

# **TH08** Exploring Microservices in a **Microsoft Landscape**

Introductory / Intermediate

MARCEL DE VRIES

Thursday, June 15, 9:30 – 10:45am

During this session, you'll have a look at how to create a Microservices architecture (MSA) using the latest Microsoft technologies. You'll discuss some fundamental theories behind MSA and show you how this can be achieved with Microsoft technologies, such as Azure Container services and Service Fabric. This session is a real must-see for any developer that wants to stay ahead of the curve in modern architectures.

#### You will learn:

- · What micro services are
- What programming models are required to make microservices a reality
- What the Microsoft platform has to offer

# **TH12** End-to-End Dependency Injection & Testable Code

Intermediate

MIGUEL CASTRO

Thursday, June 15, 11:00am - 12:15pm

Dependency Injection is one of those terms advanced programmers throw out with an expectation and assumption of full understanding on the part of the receiver. Often when people start talking about DI, though, it becomes immediately apparent they don't know what they're talking about. It's easy to get infatuated by a cool buzz phrase, especially when you hear it used by so many others. To truly understand something, you need to start by understanding the problem it's trying to solve. It's important to learn the concepts behind DI so you can write software you can properly test. This session will bring you up to speed. You'll learn about dependency injection from concept to implementation, and use raw code samples to show you how it works and what problems it solves. You'll see how writing abstracted code can help you test your applications much better, whether or not you're using a DI container. You'll also learn about DI containers, some of the characteristics and features they offer, and examine implementation examples in three different platforms.

#### You will learn:

- · About using DI for everything
- Completely eliminating class instantiation
- Ensuring across-the-board testability

# **Visual Studio / .NET Framework**



Microsoft continues to deliver updates to its dev tools at a rapid pace. There are quarterly updates to Visual Studio and Team Foundation Server (TFS) on-

premises. Visual Studio Team Services (VSTS) in the cloud continues to deliver value on a regular basis. Microsoft released Visual Studio 2017 RC and Team Foundation Server 2017 RTM in November 2016 and the Visual Studio Live! Washington DC timeframe will be packed with Visual Studio 2017, updates to Visual Studio Code, cross-platform .NET Core, and the first quarterly update to TFS. The 2017 wave has tons of new features, not to mention Microsoft's continued investment into open source and cross-platform development.

Topics in this track include:

- What's new in Visual Studio 2017
- .NET Core
- Exploring C# 7 New Features
- Windows Package Management with NuGet and Chocolatev
- Extending and Customizing the Visual Studio Environment

# T10 Getting to the Core of .NET Core

Introductory / Intermediate

ADAM TULIPER

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

The.NET Core is truly a new technology that is fast, efficient, cross platform, and open source. It also shares many similarities with the same .NET Framework you've known and loved for years. This session explains exactly what .NET Core is, but doesn't stop there. You'll also dive deep into the architecture and runtime, including how it works across different platforms like Windows, OSX, and Linux. You'll 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 Platform 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

### W04 What's New in Visual Studio 2017

Introductory / Intermediate

#### **ROBERT GREEN**

Wednesday, June 14, 8:00 - 9:15am

Visual Studio 2017 is here. As always, the latest release of Visual Studio is packed with new goodies. This session will provide a whirlwind tour of what's new in Visual Studio, with a heavy focus on new productivity and language features, but also covering performance updates, improvements to mobile, UWP and cloud development tooling and the new setup experience. Come and see why you want to upgrade to this latest release as soon as you can.

#### You will learn:

- About the new features in Visual Studio 2017 that increase your productivity
- About the new features in Visual Studio 2017 that help you cut down on your development time
- About the new features in Visual Studio 2017 that help you write better applications

# **W07** Exploring C# 7 New Features

Introductory

### **ADAM TULIPER**

### Wednesday, June 14, 9:30 - 10:45am

The new C# brings many capabilities to an already powerful language. This session will explore where C# 6 left off and C# 7 picks up, including features such as pattern matching to do advanced comparisons with values in objects, local functions for function-in-function support (which can be better than anonymous if you understand their use cases), and tuple value types. If you thought that was pretty good, there's even more. Attend this session to get a good understanding of the entire new feature set and when to use them.

#### You will learn:

- About the final C# 7 feature set
- About the new features such as tuples and what runtimes can utilize them
- When it is optimal to use new features

# **TH16** Extend and Customize the **Visual Studio Environment**

Introductory

#### WALT RITSCHER

#### Thursday, June 15, 1:15 – 2:30pm

Visual Studio is already a powerful IDE. When you add extensions, third-party tools, and templates to the mix, you have a development environment you can tailor to your exact needs. This session will show you how to find, install, and use the most helpful extensions for Visual Studio. Learn how extensions like Spell Checker, Comment Remover, CodeMaid, and Productivity Power Tools can automate and speed up the way you code. You'll also discover how to build your own extensions and share them with other developers in the Visual Studio Gallery. You'll see how to use standalone external tools to augment the Visual Studio workflow, and create custom templates that



include just the files and settings you need for your project types.

#### You will learn:

- How to use CodeMaid, Productivity Power Tools, and other Visual Studio extensions
- How to create custom item and project templates
- How to build your own custom extensions

# **TH20** Windows Package Management with NuGet and Chocolatey

Introductory

#### WALT RITSCHER

Thursday, June 15, 2:45 – 4:00pm

Developing software often requires you to install collections of packages (aka libraries). Managing these packages can be a task in and of itself; and usually requires a package manager. This session will examine some of the most popular tools for Windows package management: NuGet, Chocolatey, Boxstarter, and OneGet.

#### You will learn:

- How to work with PowerShell and NuGet
- How to use Package Restore
- How to use the Chocolatey machine package manager to install applications and utilities
- How to use Boxstarter to create installation packages

# **Web Client**



WASHINGTON, D.C.

The browser and JavaScript provide perhaps the highest and best abstraction over other operating systems. They help 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 nextgeneration Web app development wave based on JavaScript and HTML5:

- Angular 101 (double-session)
- A Tour of WebAssembly
- Building JavaScript Apps with TypeScript and VS Code
- Real-time websites and apps with SignalR
- Building Single Page Apps with Aurelia and the MVVM Pattern
- TypeScript
- Getting Started with Aurelia
- Debugging with Fiddler and Chrome developer tools
- Building SPAs with Aurelia and MVVM

# **T02** Build Better JavaScript Apps with TypeScript

Introductory / Intermediate

### **BRIAN NOYES**

Tuesday, June 13, 9:15 - 10:30am

The world of client JavaScript apps and Single Page Apps is growing rapidly. Many companies are choosing to build even their desktop enterprise apps with HTML/CSS/ JS for the platform portability. JavaScript has improved substantially in recent years, both in terms of great libraries and frameworks to make life easier building a JavaScript app. JavaScript has also improved in terms of the language itself with the release of the ECMAScript 2015 standard and the guick adoption of it by browsers, transpilers, and polyfills. It's still easy to make simple syntax errors in JavaScript that can take you hours or days to find, and it is still too easy to write JavaScript with nasty structure that makes it hard to read and maintain. TypeScript fills all these gaps in JavaScript by providing you a typed language with good object oriented constructs like classes, inheritance, visibility, generics and most of all—compile time checking. TypeScript is a superset of JavaScript and is JavaScript at runtime. You just need a few tools in your tool chain to be ready to use it. Some come learn how easy it is to choose TypeScript over JavaScript and boost your productivity and code quality as a result.

#### You will learn:

- What tooling you need to work with TypeScript in your applications
- About classes, generics, visibility, and typing of variables that distinguish TypeScript from JavaScript
- How to integration TypeScript into your applications

# **T06** Getting Started with Aurelia

Introductory

**BRIAN NOYES** 

Visual Studio (LIVE)

Tuesday, June 13, 10:45am - 12:00pm

Aurelia is a Single Page Application framework getting a lot of traction as an alternative to Angular. It includes a rich data binding system, dependency injection and modules, an intuitive and powerful routing and navigation system, and lots of extensibility throughout. This session will help introduce you to the capabilities of Aurelia and how to get started building applications with it.

#### You will learn:

- How to create an application project from scratch with Aurelia or using the Aurelia CLI or Webpack
- How to build MVVM web client applications leveraging Aurelia's data binding and dependency injection Learn how leverage the rich routing and navigation features of Aurelia

# **T14** Assembling the Web—A Tour of WebAssembly

Intermediate

**JASON BOCK** 

Tuesday, June 13, 3:00 – 4:15pm

WebAssembly is coming to JavaScript, but what is it exactly? Is it a new VM? Is it a way to create a binary version of JavaScript? Is it 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.

#### You will learn:

- What WebAssembly is all about
- About WebAssembly in action
- · About this new aspect of web development

# **W02** Creating Reactive Applications With SignalR

Intermediate

JASON BOCK

Wednesday, June 14, 8:00 - 9:15am

If you've ever wanted to build a highly responsive app that leverages a real-time communications library, then SignalR is for you! Real-time Web functionality is the ability to have the server push messaging aggressively to the client, rather than relying on the client to make multiple and frequent requests. SignalR is a set of ASP.NET server and client libraries that you can use to build real time, scalable, Web sites and apps. You can use SignalR in both enterprise and consumer apps, and across platforms. This session covers what you need to know to build a SignalR app that connects multiple clients instantaneously.

#### You will learn:

- To use the SignalR libraries
- About polling and real-time development techniques
- About cross platform client connectivity

# W10 Angular 101: Part 1

Introductory

**DEBORAH KURATA** 

Wednesday, June 14, 1:30 - 2:45pm

This beginner-level session introduces the .NET developer to Angular, the popular JavaScript framework for building client-side applications. In this first of two parts, you'll cover 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:

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

# **W14** Angular 101: Part 2

Introductory / Intermediate

**DEBORAH KURATA** 

Wednesday, June 14, 3:00 - 4:15pm

In the second of two parts, this session will cover the remaining key concepts in Angular including routing, services, observables (Reactive Extensions) and accessing data from a back-end server with http.

#### You will learn:

- About routing to navigate between pages
- About services for sharing data and operations
- About observables to managing asynchronous events

# **TH02** JavaScript for the C# (and Java) Developer

Introductory / Intermediate

PHILIP JAPIKSE

Thursday, June 15, 8:00 - 9:15am

Yes, it has curly braces. Yes, it has semi-colons. And you can write C# like code in JavaScript. But should you? JavaScript programming has many paradigms that make it different from writing typical managed code. This session will show you, the C# programmer, what you need to know to take your JavaScript to the next level.

#### You will learn:

- About the core features in JavaScript
- Important differences and similarities between JavaScript and C#
- · Common pitfalls for those new to JavaScript

# **TH10** Debugging Your Website with **Fiddler and Chrome Developer Tools**

Intermediate

#### ROBERT BOEDIGHEIMER

Visual Studio (LIVE)

### Thursday, June 15, 11:00am - 12:15pm

Debugging web sites can be tricky, but tools like Chrome Developer Tools and Fiddler continue to improve. Chrome provides a great client side JavaScript debugging experience. It also shows the live DOM and is often the only way to determine exactly what style rules have been applied in CSS. The network tab gives you the basic details on requests and responses for the page, including the "initiator" column that indicates why the request was made. The tools provide profilers, audits, and the ability to throttle the network connection. They also provide basic emulation of device sizes for web pages.

Fiddler can also be extremely helpful when debugging. You can manually or programmatically modify traffic. The auto responder feature can mock particular responses to web requests, or add specific delays for latency. The composer can construct specific requests that are difficult to create with browsers directly. Fiddler is also helpful for capturing and modifying traffic from smartphones, tablets, and non-Windows platforms. Together these free tools make it much easier to troubleshoot problems on today's complex multi-device web sites.

#### You will learn:

- How to capture and modify requests from smartphones, tablets, and desktops
- How to troubleshoot problems with JavaScript and CSS
- How to throttle network connections to see impact on performance

# **TH14** Building Single Page Web **Applications Using Aurelia.js and the MVVM Pattern**

Intermediate

#### **BEN HOELTING**

### Thursday, June 15, 1:15 – 2:30pm

XAML developers love the Model-View View-Model (MVVM) pattern. Many JavaScript frameworks use this pattern for Web-based applications. They take the client side coding model developers are familiar with and provide it to the Web world. Some frameworks like AngularJS force you into certain patterns. Many of us have learned patterns like MVVM and want to leverage that knowledge instead of learning something new. This session will define the MVVM pattern and its benefits. It will also show how you can use Aurelia and ASP.NET MVC to build responsive, robust applications that feel like desktop applications. The session will also go one step further and use TypeScript and Aurelia to make developing SPAs even more productive.

#### You will learn:

- About the MVVM Pattern
- JavaScript frameworks that enable the MVVM Pattern for the Web
- How to wire up Aurelia, TypeScript, and ASP.NET MVC

# **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, along comes ASP.NET Core 1.0, which represents a change comparable in magnitude to the move from classic Active Server Pages to ASP.NET in the first place.

The Visual Studio Live! ASP.NET track covers all this more. Come take in the content, to get current and stay that way, with coverage of the following:

- Exploring Web Development with ASP.NET Core
- Integrating AngularJS & ASP.NET MVC
- SASS and CSS
- Tools for Modern Web Development

# **W06** Explore Web Development with Microsoft ASP.NET Core 1.0

Introductory / Intermediate

#### MARK ROSENBERG

Wednesday, June 14, 9:30 - 10:45am

Microsoft ASP.NET Core is a new open-source, crossplatform, high performance and lightweight framework for building Web apps using .NET. This session will show how to create an ASP.NET Core project on your platform of choice using Visual Studio, and then deploy to virtually any production environment. You'll also explore the latest features and innovations in MVC including an introduction



to tag helpers, routing improvements, dependency injection, and more.

#### You will learn:

- Why you will want to use .NET Core
- When you should use .NET Core
- · How to use .NET Core

# **W18** SASS and CSS for Developers

Intermediate

#### ROBERT BOEDIGHEIMER

### Wednesday, June 14, 4:30 - 5:45pm

Web developers use CSS every day, but few understand how it works. Learn how to leverage CSS to separate your content and presentation. Review the basics of selectors, inheritance, and common techniques for providing for a flexible layout. Discover recent CSS 3 improvements, what browsers support them, and how to handle those that don't. See how to maximize performance when using CSS via proper use of HTTP compression, minification, bundling, and expirations. And examine how SASS can simplify CSS and provide many of its missing features like variables and mixins.

#### You will learn:

- The basics of CSS for web page styling
- How SASS provides major features that are missing in CSS
- How to process SASS to CSS

# **TH06** Integrating AngularJS & ASP.NET MVC

Intermediate

MIGUEL CASTRO

Thursday, June 15, 9:30 - 10:45am

Angular continues to take the market on a wild ride. Angular courses are popular and its developer base continues to grow. Google wrote Angular to have no external dependencies. In fact, many developers use it with HTML alone. But Microsoft developers know ASP.NET MVC is the best delivery platform for HTML. So why not make it an equally awesome delivery platform for Angularbased apps as well? When using ASP.NET MVC, you need to know how to set Angular up with regards to modules, controllers, and services. The entire site doesn't need to be one giant Single-Page-Application. This session will show you how to design an ASP.NET MVC site to include pockets of SPA that use Angular, taking advantage of binding, routing, and even back-button support—all while remaining on the client. And you can apply any of these techniques to any JavaScript library, not just Angular.

#### You will learn:

- The benefits of leveraging strengths of both technologies
- About setting up an MVC app with Angular
- How to get the two routers to play nice

# **TH18** Tools for Modern Web Development

Intermediate

#### **BEN HOELTING**

### Thursday, June 15, 2:45 - 4:00pm

The next version of ASP.NET embraces open source tools and technologies. This isn't a bad thing. Opening ASP.NET will only make it stronger by letting you use best practices for modern web development. Learning these best practices and the tools and technologies to implement them will make you a more productive developer. NPM, Bower, Gulp and Yeoman are just some of the things you need to master. These technologies will soon replace some of the things you've hacked and bandaged in ASP.NET over the years. This session will dive into these and other modern web development tools for your tool belt.

#### You will learn:

- Why ASP.NET is beginning to embrace open source
- · About NPM, Bower, Gulp, Webpack and Yoeman
- The best practices associated with these tools

# "GREAT TECHNICALS SESSION AND DEEPER CODE DIVES."

- Eric Gordan, TIAA





# **CONFERENCE ADVISORY BOARD**

#### **Andrew Brust**

Senior Director, Market Strategy and Intelligence, Datameer Visual Studio Live! Conference Co-Chair



Andrew Brust is Senior Director, Market Strategy and Intelligence at Datameer and writes for ZDNet's "Big on Data" blog. Andrew is co-author of Programming Microsoft SQL Server 2012 (Microsoft Press); has several Pluralsight courses on Big Data

and NoSQL, serves as Microsoft Regional Director and is a Microsoft Data Platform 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 in IT and technology publishing. Desmond was an editor at PC World

magazine for six years before launching an editorial consultancy that did work for leading technology firms like IBM, Intel and Sun Microsystems.

# **Michael Domingo**

Editor in Chief, Visual Studio Magazine



Michael Domingo is Editor in Chief of Visual Studio Magazine. He's been a technology journalist for more than 20 years, covering database management systems, technology certifications, and the breadth of Microsoft development and networking tools over

those years. You can find him on Twitter @domingophoto.

### **Rockford Lhotka**

CTO, Magenic Visual Studio Live! Conference Co-Chair



WASHINGTON, D.C.

Rockford Lhotka is the CTO of Magenic, and is 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. Magenic (magenic.com) is a company that specializes in planning, designing, building and maintaining your enterprise's most mission critical systems. For more information, go to lhotka.net.

**Lafe Low** 

Editor, 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 The Best in Tent Camping: New England.

### **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

companies small and large, worldwide, 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. In addition, he's become obsessed over the last few years with natural user interfaces and how to create compelling user experiences regardless of platform. In early 2010, he toured the world prepping Microsoft employees and Microsoft partners for the Microsoft Visual Studio 2010 launch. In 2012, he and his team built some of the first training content and demos for Microsoft using Visual Studio 2012, Team Foundation Server 2012, and Windows 8. For the 2013 release, he continued building new ALM content for use worldwide by Microsoft. He's currently a Visual Studio ALM MVP and co-author of "Professional Application Lifecycle Management with Visual Studio 2013" from Wrox Publishing. When not working, Brian enjoys spending time with his wife and two children who enjoy making him look bad on the Xbox One (with and without Kinect).



# **CONFERENCE SPEAKERS**

# **Jason Bock**

Practice Lead, Magenic



JJason Bock is a Practice Lead for Magenic (http://www.magenic.com) and a Microsoft MVP (C#). He has worked on a number of business applications using a diverse set of substrates and languages such as C#, .NET, and Java. He is the author of

"Metaprogramming in .NET", "Applied .NET Attributes", and "CIL Programming: Under the Hood of .NET". He has written numerous articles on software development issues and has 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.

#### **Robert Boedigheimer**

Principal Systems Developer, Schwans Shared Services, LLC



Robert Boedigheimer works for Schwans Shared Services, LLC providing business solutions with web technologies and leads Robert Boedigheimer Consulting, LLC. Robert has been designing and developing web sites for the past 15 years including the

early days of ASP and ASP.NET. He is a columnist for aspalliance.com, a Pluralsight Author, an ASP.NET MVP, an author, a MCPD: ASP.NET 3.5, and a 3rd degree black belt in Tae Kwon Do. Robert has spoken at industry conferences including VSLive!, Heartland Developers Conference, DevLink, DevTeach, Tulsa Tech Fest, DevWeek, DevReach, SDC, TechEd, AJAXWorld, and numerous national and international events...

# Eric D. Bovd Founder and CEO, responsiveX



Eric D. Boyd is the Founder and CEO of responsiveX, a Windows Azure MVP, and a regular speaker at national conferences, regional code camps and local user groups. He is so passionate about apps and cloud services that he founded responsiveX (www.

responsiveX.com), a management and technology

consultancy that helps customers create great web, mobile and client experiences, and these apps are often powered by cloud services. 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.

#### **Andrew Brust**

WASHINGTON, D.C.

Senior Director, Market Strategy and Intelligence, Datameer Visual Studio Live! Conference Co-Chair



Andrew Brust is Senior Director, Market Strategy and Intelligence at Datameer and writes for ZDNet's "Big on Data" blog. Andrew is co-author of Programming Microsoft SQL Server 2012 (Microsoft Press); has several Pluralsight courses on Big Data

and NoSQL, serves as Microsoft Regional Director and is a Microsoft Data Platform MVP.

# **Miguel Castro**

Principal Consultant, Melvicorp LLC



Whether playing on the local Radio Shack's TRS-80 or designing systems for clients around the globe, Miguel has been writing software since he was 12 years old. He insists on staying heavily involved and up-to-date on all aspects of software application design

& development, and projects that diversity onto the type of training and consulting he provides to his customers and believes that it's never just about understand the technologies, but how technologies work together. In fact, it is on this concept that Miguel based two of his Pluralsight courses, Building End-to-End Multi-Client Service Oriented Applications, which was #1 for several weeks, and Developing Extensible Sotware. Miguel is a Microsoft MVP since 2005 and when he's not consulting or training, Miguel speaks at conferences around the world, practices combining on-stage tech and comedy, and never misses a Formula 1 race. But best of all, he's the proud father of a very tech-savvy 10 year old girl, and a proud husband to the woman that homeschools her.

# **Roy Cornelissen**

Lead Consultant, Xpirit



Roy works as a software architect in the Netherlands. With over 16 years of experience in IT, Roy has designed and built many enterprise systems for customers using primarily Microsoft, Xamarin, and NServiceBus technologies.

As Mobile Lead at Xpirit, Roy is responsible for the vision and strategy for their Mobile capability. He specializes in designing and building mobile solutions for iOS, Android and Windows, using Xamarin technology. Roy co-founded the Dutch Mobile .NET Developers group, and he is an active participant in the Xamarin and NServiceBus communities. He has been awarded the Xamarin Insider, Xamarin MVP and NServiceBus Champ awards. He is a frequent speaker at software development conferences such as Microsoft TechDays, Xamarin Evolve, NSBCon, Visual Studio Live!, and Gartner Catalyst. He writes articles and blogs about his professional and personal interests.

As an avid amateur cook, Roy shoots for the (Michelin) stars and he applies the same passion for quality and creativity in his work. He loves drawing and hand lettering with good old pencil and paper and also plays the guitar in his spare time.

# **Benjamin Day**

Consultant & Trainer, Benjamin Day Consulting, Inc.



Benjamin Day is a consultant and trainer specializing in software best practices using Microsoft tools. Ben's main areas of emphasis include Team Foundation Server, Scrum, software testing, and software architecture. He is a Microsoft Visual Studio

ALM MVP, a certified Scrum trainer via Scrum.org, and a speaker at conferences such as TechEd and Visual Studio Live! When not developing software, Ben's been known to go running and sea kayaking in order to balance out his love of cheese, cured meats, and champagne. He can be contacted via www.benday.com.



# **CONFERENCE SPEAKERS** (continued)

### **Marcel de Vries**

CTO, Xpirit



Marcel spends most of his time helping organizations build Enterprise Applications and implementing Application Lifecycle Management (ALM) practices and tooling. Marcel works for a new start-up company called Xpirit that provides premium

consulting services on ALM, Cloud, enterprise mobility and Security. His job title there is Chief Technical Manager (CTO). As CTO Marcel spends most of his time looking at how new emerging technologies can help organizations build better quality software and do this is a more productive way. Marcel has a passion for learning new technologies and teaching the things he learned on the way when applying technology to solve business problems. Marcel works as a consultant in the field of Application Lifecycle Management, Cloud application architectures and Cross platform Enterprise Mobile app development. Marcel writes for websites and magazines like: MSDN, The Architecture journal and local magazines like SDN Magazine. Marcel is a frequent speaker at industry conferences like Microsoft TechDays, Visual Studio Live!, Microsoft Tech Ed and local user group events. Marcel also spends a lot of time teaching topics like Visual Studio ALM, Windows Workflow Foundation, Xamarin Mobile app development and Web development. In his spare time, he is also an author of online courses at Pluralsight. Marcel is awarded by Microsoft the Microsoft ALM MVP award and is also a Microsoft Regional Director.

# **Kevin Ford** Mobile Practice Lead, Magenic



Kevin Ford is the Mobile Practice Lead with Magenic leading development with native mobile technologies, Xamarin and Cordova. For over twenty years he has worked with enterprise application development using the Microsoft stack and 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 that Magenic consultants have the right relationships, resources, and opportunities to advance their mobile technical skills. Kevin holds an MBA from Babson

### **Robert Green** Technical Evangelist, Microsoft



Robert Green is a Technical Evangelist in the Developer & Platform Evangelism (DPE) group at Microsoft. He focuses on Visual Studio and Windows 8 enterprise development. Robert is the host of the Visual Studio Toolbox show on Channel 9.

This is his second stint at Microsoft. From 2005 to 2010 he was a Sr. Consultant with MCW Technologies, focused on developer training. He authored or co-authored a number of Visual Studio and .NET courses for AppDev. Prior to that, in his first stint at Microsoft, he worked in Developer Tools marketing and then as the Community Lead on the Visual Basic team.

# **Ben Hoelting** Director of Technology, Aspenware



Director of Technology for Aspenware, C# MVP and Telerik Insider. 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 back in 2002. Over the last few years he has done some work for the Department of Defense. He left the government world and now works for Aspenware in Denver. His most recent projects include a XAML line of business application that uses the ADO.NET Entity Framework to access the backend data store. He also is working on an MS Office automation project as well as geospatial ASP.NET MVC website. 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. Finally, Ben is very involved in the local .NET community and is the leader of the South Colorado .NET User Group.

# **Billy Hollis**

Next Version Systems



Billy Hollis is an author and software developer from Nashville, Tennessee. Billy is co-author of the first book ever published on Visual Basic .NET, VB .NET Programming on the Public Beta. He has written many articles, and is a frequent speaker at

conferences. He is the Regional Director of Developer Relations in Nashville for Microsoft, and runs a consulting company focusing on Microsoft.NET. You can visit his website at: www.billyhollis.com.

### **Philip Japikse**

Principal Software Engineer, Strategic Data Systems, Inc.



A Principal Software Engineer with Strategic Data Systems (http://www.sds-consulting. com), 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, developing software for over 30 years, and heavily involved in the agile community since 2005. Phil is the Lead Director for the Cincinnati .NET User's Group (www.cinnug.org) and the Cincinnati Software Architect Group, co-hosts the Hallway Conversations podcast (www.hallwayconversations.com), founded the Cincinnati Day of Agile (www.dayofagile.org), and volunteers for the National Ski Patrol. Phil enjoys to continuously learn new tech and is always striving to improving his craft. You can follow Phil on twitter via www. twitter.com/skimedic and read his blog at www.skimedic. com/blog.

### **Deborah Kurata** President, InStep Technologies, Inc.



Deborah Kurata is cofounder of InStep Technologies Inc., a professional consulting firm that focuses on turning your business vision into reality using Microsoft .NET technologies. She has over 15 years of experience in architecting, designing, and

developing successful applications. Deborah has authored



# **CONFERENCE SPEAKERS** (continued)

several books, including the "Doing Objects in Visual Basic" series (Addison-Wesley), "Best Kept Secrets in .NET" (Apress) and "Doing Web Development: Client-Side Techniques" (Apress). Deborah speaks at conferences such as Visual Studio Live!, DevDays, and TechEd. For her work in support of software development and software developers, she has been recognized with the Microsoft Most Valuable Professional (MVP) award. After a hard day of coding and taking care of her family, Deborah enjoys blowing stuff up (on the XBox of course).

**Nick Landry** Senior Technical Evangelist, Microsoft



Nick Landry (@ActiveNick) is a mobility pioneer specializing in the design and production of mobile applications for consumers and the enterprise using diverse cross-platform technologies including Windows Phone, Windows 8, iOS, Android,

Mobile Web, Xamarin and PhoneGap. Nick works at Microsoft as a Senior Technical Evangelist in the New York Metro area and engages with developers, students and IT pros to help them learn, adopt and use the Microsoft developer platform to design and build the next generation of apps for Windows Phone, Windows 8 and Windows Azure. Nick is also a Nokia Developer Ambassador whose mandate is to educate and support Windows Phone developers to maximize their success. Prior to joining Microsoft, Nick spent almost two years as a Senior Product Manager for mobile, data visualization and geospatial developer tools across multiple technologies and platforms. He previously spent most his career in IT consulting and services organizations across various technical and business roles, designing, building, managing and selling innovative software solutions for some of 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 like Visual Studio Live!, CodePalousa, Prairie DevCon, HDC, DevTeach, Xamarin Evolve, TechEd, and others. Nick was a 10-year Microsoft MVP awarded on Windows Phone Development, and is a Nokia Developer Champion. With over 20 years of

professional experience, Nick is a developer and software architect by trade and specializes in Cross-Platform Mobility, Location Intelligence & Geospatial development, Data Visualization, Cloud Computing and Mobile Game Development. He authored multiple technical magazine articles, white papers, and mobility courses, has been a technical editor for IT books, and holds several professional certifications. Blog: www.AgeofMobility.com - LinkedIn: www.linkedin.com/in/activenick

### **Vishwas Lele** Chief Technology Officer, AIS



WASHINGTON, D.C.

Vishwas Lele is an AIS Chief Technology Officer and is responsible for the company vision and execution of creating business solutions using .NET technologies. Vishwas brings close to 20 years of experience and thought leadership to his position, and has

been at AIS for 13 years. A noted industry speaker and author, Vishwas is the Microsoft Regional Director for the Washington, D.C. area and a member of the Connected Systems Division Advisors group. Additionally, Vishwas has received an MVP (Most Valuable Professional) for Solution Architecture award for 2009.

### **Rockford Lhotka**

CTO. Maaenic Visual Studio Live! Conference Co-Chair



Rockford Lhotka is the CTO of Magenic, and is 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. Magenic (magenic.com) is a company that specializes in planning, designing, building and maintaining your enterprise's most mission critical systems. For more information, go to lhotka.net.

#### **Leonard Lobel**

CTO, Sleek Technologies, Inc.



Leonard Lobel is the chief technology officer (CTO) and co-founder of Sleek Technologies, Inc., a New York-based development shop with an early adopter philosophy toward new technologies that services organizations ranging from small shops to high-profile

clients. He is also a principal consultant at Tallan, Inc., a Microsoft Gold Certified Partner. 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 is also a Microsoft MVP for SOL Server, lead author of the MS Press book "Programming Microsoft SQL Server 2008" (currently being updated for SQL Server 2012), consultant, trainer, and frequent speaker at local user group meetings. Visual Studio Live!, SQL PASS, and other industry conferences. He can be reached at lenni.lobel@sleektech.com.

### **Sahil Malik** Founder, winsmarts.com



Sahil Malik, the founder of winsmarts.com is an author, trainer and consultant who has worked in 18 countries and 5 continents over the past many years. As a Microsoft MVP award recipient for the past 10+ years, author of 20+ books and numerous articles.

he brings with him an immense practical experience, insight and ability to make complex topics easy to understand and absorb. As a total geek, he loves interacting with fellow geeks in realtime. You can follow him at @sahilmalik.



# **CONFERENCE SPEAKERS** (continued)

### **Brian Noyes** CTO, Solliance



Brian Noyes is CTO and Architect at Solliance. Brian is a Microsoft Regional Director and MVP, and specializes in rich client technologies including XAML and HTML 5, as well as building the services that back them with WCF and ASP.NET Web API.

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. He publishes articles frequently in a variety of publications and speaks at conferences worldwide including Microsoft TechEd, Visual Studio Live!, DevTeach, and others. 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.net and Twitter @briannoyes.

### **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

companies small and large, worldwide, 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. In addition, he's become obsessed over the last few years with natural user interfaces and how to create compelling user experiences regardless of platform. In early 2010, he toured the world prepping Microsoft employees and Microsoft partners for the Microsoft Visual Studio 2010 launch. In 2012, he and his team built some of the first training content and demos for Microsoft using Visual Studio 2012, Team Foundation Server 2012, and Windows 8. For the 2013 release, he

continued building new ALM content for use worldwide by Microsoft. He's currently a Visual Studio ALM MVP and co-author of "Professional Application Lifecycle Management with Visual Studio 2013" from Wrox Publishing. When not working, Brian enjoys spending time with his wife and two children who enjoy making him look bad on the Xbox One (with and without Kinect).

#### **Walt Ritscher**

**WASHINGTON, D.C.** 

Staff Author, Lynda.com at LinkedIn



Walt's enthusiasm for crafting software interfaces blossomed early. Just a few days after discovering how to move pixels around a computer screen he was devouring books on the topic of computer graphics and UI design. Before long he was sharing his

discoveries with other technology buffs, a lifelong pursuit that has led to teaching engagements at universities, private training companies and the international conference circuit. As a consultant he has worked with a wide spectrum of clients, including Microsoft, HP, Intel, and Intuit. He is now a staff author at Lynda.com, part of the LinkedIn family, where his content team produces hundreds of technical training courses for software developers each year. His current UI obsession revolves around the XAML APIs. You can find his blog at blog. xamlwonderland.com and visualstudioadventures.com

### Mark Rosenberg Technical Instructor, New Horizons



Mark Rosenberg has been writing software with Microsoft technologies since 1997. He has been speaking to user groups and at code camps since 2005 and been a certified trainer Since 2007. Mark likes to talk to developers and has been talking to anyone

who will listen. He is very active in the community, both speaking at user groups, former INETA Board member and still active with INETA. He currently is working as a senior development instructor at New Horizons in Washington, D.C., TX.

# **Adam Tuliper**

Sr. Technical Evangelist, Microsoft



Adam works as a Technical Evangelist for Microsoft. Prior to that he worked as a software architect in defense, finance, pharma, manufacturing, technology, and public sector fields over a span of 18+ years. He has a security background, and is deeply

involved with web technologies.

### **Michael Washington** Founder, AiHelpWebsite.com



Michael Washington is the founder of AiHelpWebsite.com. He is an ASP.NET, C#, and Visual Basic programmer. He has extensive knowledge in process improvement, billing systems, and student information systems. He is a Microsoft MVP.

He is the author of numerous books including An Introduction to the Microsoft Bot Framework and Creating HTML 5 Websites and Cloud Business Apps Using LightSwitch In Visual Studio 2013-2015. Michael has a son, Zachary and resides in Los Angeles with his wife Valerie.



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### **Baltimore SQL Server Users Group**

The Baltimore SQL Server Users Group is focused on all things SQL Server. We hold free monthly meetings focusing on SQL Server DBA, Development and Business Intelligence topics. www.bssug.org



# .NET Developers Association

The .NET Developers Association is an Eastside community oriented group aimed at furthering the education of .NET developers. www.meetup.com/NET-Developers-Association/



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# **Windows Developer User Group**

The Windows Developer User Group has been established to nurture knowledge base and collaboration among Windows Phone & Windows 8 application developers & enthusiasts. While we are primarily based in Columbus OH, developers from all around Ohio, neighboring states and just about anybody who has interest in the Microsoft ecosystem, is most welcome. www.meetup.com/windowsdevug/

Please check vslive.com/dc for the growing list of sponsors and partners for the event.





# **VENUE & TRAVEL**







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SW of the hotel is the easiest way to get around inside the Capital Beltway!

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Special attendee rate: \$279\*

Book by: May 22, 2017

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Reagan National Airport—4 miles from the Marriott Marguis Washington, D.C. Dulles International Airport—27 miles from the Marriott Marguis Washington, D.C. Baltimore Washington International Airport—32 miles from the Marriott Marquis Washington, D.C.

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

### PARKING AT MARRIOTT MARQUIS WASHINGTON, D.C.

Valet parking: \$47 (subject to taxes and change without notice)

**ADDITIONAL LOCAL PARKING** (all parking rates subject to change) Colonial Parking: 601 13th Street NW—\$20.00 per day (no overnight)

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LAZ Parking: 700 13th Street NW—\$18.00 per day (no overnight)

#### **SUBWAY STATION**

Gallery Place - Chinatown (Green, Yellow & Red Lines), 0.3 miles SW

# **Visiting Washington, D.C.**

Exploring a city can be an exciting adventure. Visit the Official Washington, D.C. Tourism Site to start planning your trip today!

<sup>\*</sup>The room rate excludes applicable taxes.





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**SIGN UP** for the conference package that best meets your schedule and needs!

Register now at www.vslive.com/dc

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Group Discounts are available! See page 36 for details.

Are you a Visual Studio Live! or Live! 360 alumnus? Alumni discounts are available! See page 37 for details

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The Visual Studio Live! Washington, D.C. 4-Day Package is your four day allaccess pass to every keynote, session, workshop and event June 12-15, 2017.

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- Pre-conference workshops
- Reception
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- Lunch (June 12-15)
- Laptop Computer Bag
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- · Online access to all course notes and sample code

SUPER EARLY BIRD THROUGH APRIL 21, 2017	EARLY BIRD THROUGH MAY 19, 2017	STANDARD THROUGH JUNE 12, 2017		
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**REGISTRATION PACKAGES** (continued)

Visual Studio (LIVE)

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# **WORKSHOP PASS (1 DAY)**

The Visual Studio Live! Washington, D.C. Workshop Pass grants you access to one full-day workshop on Monday, June 12, 2017.

STANDARD THROUGH JUNE 12, 2017

\$550



# **REGISTRATION PACKAGES** (continued)

**GROUP DISCOUNTS FOR YOU + 2** 

Visual Studio (LIVE)

For questions or to register your group, please call 972.304.5380

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# **VISUAL STUDIO LIVE! 4-DAY GROUP PACKAGE**

**WASHINGTON, D.C.** 

The Visual Studio Live! Washington, D.C. 4-Day Group Package is for groups of 3 or more attendees from the same company registering for the 4-Day Conference Package.

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- Pre-conference workshops
- Reception
- Networking Events
- Lunch (June 12-15)
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- T-shirt with Completed Survey
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# **REGISTRATION PACKAGES** (continued)

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workshop and event June 12-15, 2017.  VISUAL STUDIO LIVE! 4-DAY	\$1,495	\$1,595	\$1,795
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<ul><li>Reception</li><li>Networking Events</li><li>Lunch (June 12-15)</li></ul>			
<ul> <li>Laptop Computer Bag</li> <li>T-shirt with Completed Survey</li> <li>Online access to all course notes and</li> </ul>			
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