

Visual Studio **LIVE!**

EXPERT SOLUTIONS FOR ENTERPRISE DEVELOPERS

Nashville

Your Code Powers the World.
Our Training Powers You.

30th ANNIVERSARY
VSLive!
1993 - 2023

MAY 15-19, 2023
RENAISSANCE NASHVILLE HOTEL
NASHVILLE, TN

IN-DEPTH
TECHNICAL
CONTENT
ON:



DevOps
and Beyond



Cloud,
Containers and
Microservices



AI, Data and
Machine Learning



Developing
New Experiences



Technical
Excellence &
Leadership Skills



The Core of .NET



Full Stack Web
Development

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A MESSAGE FROM THE CONFERENCE CO-CHAIRS

AFTER MORE THAN 30 YEARS OF DELIVERING GREAT, in-depth, technical content all over the US—as well as events in Europe, Asia, and Australia—VSLive! is coming to Music City, May 15 to 19, 2023! From honky-tonks with live music to the Johnny Cash Museum, and the “Grand Ole Opry”, Nashville, TN, has you covered with great entertainment and things to see. As the home of Vanderbilt University, Nashville is a great city for VSLive! to bring developers and their friends, cutting edge education.

We’re Andrew Brust, Angela Dugan, Rockford Lhotka, and Brian Randell, and as Conference Co-Chairs for Visual Studio Live! Nashville, we’d like to personally invite you to join us at the Renaissance Hotel in Nashville, TN. As veterans of the show and longtime speakers, we may be biased, but we firmly believe that an in-person experience, where you get to have two-way conversations about the latest tools and technology, with some of the finest expert speakers in the business—and with the chance to network with your peers—continues to deliver the highest level of value. The rapid pace of change means there’s more you need to know. Our cohort of technical speakers will be ready to help you know what’s ready, what’s not, and provide their expert advice and knowledge on how to build the best solutions for your customers.

Visual Studio Live! Nashville gives you a rich, multi-track event with great 75-minute breakout sessions, 150-minute-deep dives, a full day of hands-on-lab training, and an all-day set of workshops that cover a wide array of development technologies for everyone on your team. We have picked every hands-on-lab, workshop, deep dive, and session

with the goal of transferring knowledge to you, so you can be a better developer and help your organization succeed in this ever-changing world.

Kicking off the week, we’ve got two great, all-day, hands-on-labs covering Web Development with ASP.NET Core and EF Core, and the Human Side of Agile and DevOps. During the next three days of the week, we have a couple of deep dives into .NET Maui and Web Services with ASP.NET Core. And at the end of the week, we have all-day seminars providing deep coverage of Shipping Faster & More Securely with Azure PaaS, SQL Server Developer Deep Dive, and full day diving into Microsoft Blazor Top to Bottom. The goal of these hands-on labs, workshops, and deep dive sessions is to go further into the subjects you need to master to give you the edge in your job and to help your companies build better apps.

However, sometimes you need broader coverage of different products and processes. We’ve got you covered there with fresh coverage on Microsoft Visual Studio 2022, .NET 6 and .NET 7, container technologies, DevOps, and data visualization and analysis. If the Web is more your style, you’ll find coverage of JavaScript, TypeScript, Angular, RxJS, and Blazor, as well as ASP.NET and ASP.NET Core on the server.

But what if you want to improve the quality of your software? Mystified as to how you can bring DevOps to your organization? Are you looking to enhance the culture of your team? We’re confident that our speakers will answer your questions with practical guidance on all these, plus mobile development, database development, and more.

Our industry continues the march toward the future. To keep up, you need to absorb rapidly and adapt. Go beyond Internet-based content to return to a live experience, where you get to ask questions in real-time and engage directly with the experts and your peers. Find a way to get to Visual Studio Live! Nashville and get the tools to help yourself grow. All this learning means you’ll gain an appetite to learn more as well as get out and have some “hot chicken” and maybe a local whiskey if you choose.

We hope to see you there!

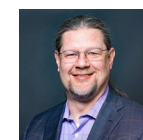
VISUAL STUDIO LIVE! CONFERENCE CO-CHAIRS



Andrew Brust
Founder & CEO, Blue Badge Insights



Angela Dugan
Solutions Director, 3Cloud Solutions



Rockford Lhotka
VP of Strategy, Xpirit



Brian Randell
Product Marketing Director, GitHub

TEN REASONS TO ATTEND VISUAL STUDIO LIVE! 2023

10

BACK BY POPULAR DEMAND: HANDS-ON LEARNING. AGAIN, at VSLive! This year there's another full day of learning with the Monday HANDS-ON LABS. Bring your laptop and learn by doing!

9

WE'VE NEVER SKIMPED ON CONTENT. VSLive! is known for being a technically-focused conference, with up to 5 full days of educational sessions on hot topics like .NET 6 & 7 and .NET MAUI, Blazor, ASP.NET Core, ML.NET, Microservices, SQL Server 2022, C#, Azure, and so much more....

8

RESPECT THE PAST; CODE THE FUTURE. Get relevant, immediately usable training on what's happening on the developer landscape now, and learn what's coming next to get out ahead of the competition.

7

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

6

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

5

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

4

BE READY FOR NOW & NEXT. Get up to speed on what's happening on the .NET developer landscape now, and learn what's coming next to get out ahead of the competition. Keep yourself and your business competitive and future-ready with training on Microsoft Visual Studio 2022, .NET 6, DevOps, MAUI, JavaScript, TypeScript, Angular, Blazor, modern data warehouse technology, and so much more...

"I PARTICULARLY LIKED THE DIVERSITY OF OPTIONS FOR EACH TIMESLOT. I FOUND MYSELF MORE OFTEN WISHING I COULD ATTEND TWO SESSIONS AT ONCE RATHER THAN STRUGGLING TO FIND INTEREST IN ONE."

— VSLive! Austin 2022 Attendee

3

IT'S MUSIC CITY! Code by day and enjoy all the live music, nightlife, delicious cuisine, and southern hospitality Nashville has to offer at our headquarters in the heart of downtown, the Renaissance.

2

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

1

30 YEARS OF CODING INNOVATION! For over 30 years, Visual Studio Live! (VSLive!) has been THE trusted resource for .NET developer-focused education and training! *We are proud to have served tens of thousands, giving them the training and education they've needed since 1993.*

THE FUN STUFF: VISUAL STUDIO LIVE! NASHVILLE EVENTS & ACTIVITIES

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

MIX & MINGLE

Monday, May 15

This is your opportunity to meet fellow attendees and start friendships that can last for the week or even longer. Join us to mix and mingle with other conference attendees and speakers for a casual no-host mixer. Enjoy light appetizers provided by VSLive! while you get to know your fellow attendees and take in the exciting Nashville views. Everyone is responsible for their own beverages.

WELCOME RECEPTION & TRIVIA NIGHT

Tuesday, May 16

Enjoy drinks and snacks while you relax, unwind, and network with fellow attendees and speakers after a long day of learning.

Test your knowledge against your fellow attendees with VSLive! Trivia Fun!. Everyone can join in by using their mobile device. Each round winner will receive a prize along with bragging rights for the week!

TABLE TOPIC LUNCH

Wednesday, May 17

Join other attendees at lunch to share ideas, talk about the issues of the day, and maybe solve a few. While you enjoy lunch, you can find and connect with other like-minded people at tables designated for certain languages, technologies, and interests.

We will also have designated speaker tables - noted with the speakers' name. Join your favorite speaker for a lunchtime discussion or to follow up on any questions from a session.

VSLIVE!'S MUSIC CITY TROLLEY TOUR

Wednesday, May 17, 6:15pm - 8:00pm

Pre-registration & \$10 Confirmation Fee Required

See Nashville's famous sights and hear about its history when you hop aboard Old Town Trolley Tour's VSLive! Music City Tour for a picturesque evening you won't forget! You'll take in breathtaking views of the city and cruise past notable landmarks, experiencing them like you never have before.

Your 90-minute tour will explore the sites that make this world class city one of the top visited places in the United States, including Nissan Stadium, Historic 2nd Avenue, Wildhorse Saloon, the Ryman Auditorium, the historic Arcade, Woolworth's where the late Rep. John Lewis participated in the civil rights sit-in's, Music City Walk of Fame, Country Music Hall of Fame, TN State Capitol, Bi-Centennial Mall State Park designed with Tennessee history, Marathon Motorworks, Antique Archeology store from the American Pickers tv show, The Parthenon at Centennial Park, Belmont Mansion, Music Row, and more.

Your knowledgeable Tour Conductor will provide information and stories about all the places you'll see. Hop aboard for a night out in Nashville with VSLive!






MUSIC CITY TROLLEY TOUR



TABLE TOPIC LUNCH

AGENDA-AT-A-GLANCE


DevOps and Beyond	Cloud, Containers and Microservices	AI, Data and Machine Learning	Developing New Experiences	Technical Excellence & Leadership Skills	The Core of .NET	Full Stack Web Development
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START TIME	END TIME	Visual Studio Live! Pre-Conference Hands-On Labs: Monday, May 15, 2023 <i>(Separate entry fee required)</i>							
8:00 AM	9:00 AM	Pre-Conference Hands-On Labs Registration • Coffee and Morning Pastries							
9:00 AM	6:00 PM	HOL01 Hands-On Lab: Develop an ASP.NET Core App with EF Core in a Day - <i>Philip Japikse</i>		HOL02 Hands-On Lab: The Human Side of Agile and DevOps - <i>Benjamin Day & Angela Dugan</i>		HOL03  Hands-On Lab: Build Your First Application with Blazor - <i>Jeffrey T. Fritz</i>			
6:30 PM	8:00 PM	Mix & Mingle @ VSLive!							
START TIME	END TIME	Visual Studio Live! Day 1: Tuesday, May 16, 2023							
7:00 AM	8:00 AM	Registration • Coffee and Morning Pastries							
8:00 AM	9:15 AM	T01 Getting Up and Running with Modern Angular - <i>Allen Conway</i>		T02 Useful New-ish Features in .NET/C# - <i>Deborah Kurata</i>		T03 Azure Data Lakes and Delta Lakes - <i>Ken Muse</i>		T04 Making Design Pay - <i>Billy Hollis</i>	
9:30 AM	10:45 AM	T05 RxJS in Angular: Working with Data - <i>Deborah Kurata</i>		T06 Be More Productive with .NET Using GitHub Copilot and GitHub Codespaces - <i>Brian Randell</i>		T07 Designing Azure Modern Data Warehouse Solutions - <i>Ken Muse</i>		T08 To Be Announced	
11:00 AM	12:00 PM	 KEYNOTE: TO BE ANNOUNCED <i>Paul Yuknewicz, Principal Group Product Manager, Microsoft</i>							
12:00 PM	1:00 PM	Lunch							
1:00 PM	1:30 PM	Dessert Break • Visit Exhibitors							
1:30 PM	2:45 PM	T09 Introduction to Blazor - <i>Rockford Lhotka</i>		T10 Deep Dive with MAUI - <i>Sam Basu</i>		T11 WebAssembly in the Cloud - <i>Jon Flanders</i>		T12 DevOps is Dead, Long Live DevOps! - <i>Brian Randell</i>	
3:00 PM	4:15 PM	T13  Beyond the Basics – Building Fast and Reusable Code with Blazor - <i>Jeffrey T. Fritz</i>				T14 Use OpenAPI to Document and Generate Your Services and Clients - <i>Jon Flanders</i>		T15 GitHub Actions - Soup to Nuts - <i>Mickey Gousset</i>	
4:15 PM	5:30 PM	Welcome Reception							

Sessions and speakers subject to change.

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

DevOps and Beyond	Cloud, Containers and Microservices	AI, Data and Machine Learning	Developing New Experiences	Technical Excellence & Leadership Skills	The Core of .NET	Full Stack Web Development
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START TIME	END TIME	Visual Studio Live! Day 2: Wednesday, May 17, 2023			
7:30 AM	8:00 AM	Registration • Coffee and Morning Pastries			
8:00 AM	9:15 AM	W01 ASP.NET Basics for Experts - Layla Porter	W02  Bringing the Web to Native Applications with Blazor Hybrid - Jeffrey T. Fritz	W03 Busy Developer's Guide to Auth-n-Auth - Ted Neward	W04 I Love YAML: Using Azure DevOps to Build and Release to Azure - Benjamin Day
9:30 AM	10:45 AM	W05 Building Enterprise Blazor Apps Using CSLA .NET - Rockford Lhotka	W06 Busy Developer's Guide to Flutter - Ted Neward	W07 Power BI and Azure Databricks SQL: BI on Big Data for Real - Andrew Brust	W08 Dependencies Demystified - Jason Bock
11:00 AM	12:00 PM	GENERAL SESSION: LIES DEVELOPERS TELL THEMSELVES <i>Billy Hollis, Developer. Designer. Speaker. Author.</i>			
12:00 PM	1:00 PM	Table Topic Lunch			
1:00 PM	1:30 PM	Dessert Break • Visit Exhibitors			
1:30 PM	1:50 PM	W09 Fast Focus: JavaScript Framework/Library Showdown - Allen Conway		W10 Fast Focus: Power BI Metrics: Managing KPIs and Scorecards for Yourself and Your Team - Andrew Brust	W11 Fast Focus: Getting .NET Interactive Notebooks - Jason Bock
2:00 PM	2:20 PM	W12 Fast Focus: Using Blazor in MAUI - Rockford Lhotka		W13 Fast Focus: What Manifests are These? - Mike Benkovich	W14 Fast Focus: WTF UX - UX Research and Design AMA - Debbie Levitt
2:30 PM	3:45 PM	W15 TypeScript: Moving Beyond the Basics - Allen Conway	W16 Improving Agility by Using Customers' Definitions of "Quality" and "Done" - Debbie Levitt	W17 From Core to Containers to Orchestration - Modernizing my Compute - Mike Benkovich	W18 GitHub Actions: beyond CI/CD - Rob Bos
4:00 PM	5:15 PM	W19 What's New in .NET 7 APIs - Jason Bock	W20 How to Fix a Failing Project - Benjamin Day	W21 An Infrastructure as Code Bake-off, Comparing ARM, Terraform, and Bicep - Mike Benkovich	W22 Protect Yourself Against Supply Chain Attacks - Rob Bos
6:15 PM	8:00 PM	VSLive!'s Music City Trolley Tour - Pre-registration & \$10 Confirmation Fee Required			

Sessions and speakers subject to change.

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

DevOps and Beyond	Cloud, Containers and Microservices	AI, Data and Machine Learning	Developing New Experiences	Technical Excellence & Leadership Skills	The Core of .NET	Full Stack Web Development
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START TIME	END TIME	Visual Studio Live! Day 3: Thursday, May 18, 2023				
7:30 AM	8:00 AM	Registration • Coffee and Morning Pastries				
8:00 AM	9:15 AM	TH01 Deep Dive: Web Services with ASP.NET Core - Philip Japikse	TH02 Building Cloud-Ready Applications in .NET - Layla Porter	TH03 Responsible AI - Veronika Kolesnikova	TH04 How to Increase Innovative Problem Solving in Teams - Amber Vanderburg	
9:30 AM	10:45 AM		TH05 Protect your Code with GitHub Security Features - Rob Bos	TH06 Building Event-Driven Microservices with the Azure Cosmos DB Change Feed - Leonard Lobel	TH07 Advanced OOP - Laws, Patterns & Idioms - Clint Edmonson	
11:00 AM	12:15 PM	TH08 Is there ML.NET in MAUI? - Veronika Kolesnikova	TH09 Entity Framework Performance Monitoring and Tuning - Jim Wooley	TH10 What's New for Developers in SQL Server 2022 - Leonard Lobel	TH11 Data Driven Decision Making - Amber Vanderburg	
12:15 PM	1:15 PM	Lunch				
1:15 PM	2:30 PM	TH12 Practical Internet of Things for the Microsoft Developer - Eric D. Boyd	TH13 Too Late for TDD? Start Test Eventually Development Now - Jim Wooley	TH14 Getting Your Story Straight with Data Visualizations - Stacia Varga	TH15 Getting Started with Design Thinking: A Guide For Developers and Managers - Billy Hollis	
2:45 PM	4:00 PM	TH16 Create Intelligent Bots with the Power Platform, Azure, and Cognitive Services - Eric D. Boyd	TH17 Flow, the Universe and Everything - Clint Edmonson	TH18 Making the Leap from Reporting to Data Analysis - Stacia Varga	TH19 Measuring Up! How To Choose Agile Metrics Your Team Won't Hate - Angela Dugan	
START TIME	END TIME	Visual Studio Live! Post-Conference Workshops: Friday, May 19, 2023 (Separate entry fee required)				
7:30 AM	8:00 AM	Post-Conference Workshop Registration • Coffee and Morning Pastries				
8:00 AM	5:00 PM	F01 Workshop: Ship Faster, More Securely with Azure PaaS - Brian Randell & Mickey Gousset		F02 Workshop: Microsoft Blazor Top to Bottom - Jason Bock, Allen Conway & Rockford Lhotka		F03 Workshop: SQL Server Developer Dive - Leonard Lobel

Sessions and speakers subject to change.

KEYNOTE SESSIONS

WANT A FRONT-ROW SEAT TO THE FUTURE OF TECHNOLOGY? Attend the keynote & general session for Visual Studio Live! Nashville to learn what's hot on today's tech landscape and what exciting developments lie ahead for this year and beyond.

TUESDAY KEYNOTE

To Be Announced

Tuesday, May 16, 11:00am – 12:00pm



Paul Yuknewicz

Principal Group Product Manager, Microsoft

Details to be announced.

WEDNESDAY GENERAL SESSION

Lies Developers Tell Themselves

Wednesday, May 17, 11:00am – 12:00pm



Billy Hollis

Developer. Designer. Speaker. Author.

All humans sometimes deceive themselves, and developers are no exception. From “I can get this done in a week” to “My job is to write code”, developers often convince themselves of things that are only partially true - or even outright ridiculous.

These seductive-but-false notions are factors in everything from poor software quality to unnecessary stress on developers and other team members. In this session, developer/designer/architect Billy Hollis will bring out his top ten uncomfortable truths about software development, with some humor to make them easier to hear.

You will learn:

- See the top uncomfortable truths developers sometimes don't want to face
- Ways to avoid fooling oneself during software development
- Have some fun exploring some of the foolish things developers do

“BEST PART OF THE CONFERENCE: GETTING AWAY FROM WORK FOR A MINUTE. TALKING WITH OTHER DEVELOPERS TO SEE WE HAVE SIMILAR PROBLEMS. I LIKED GETTING SUGGESTIONS AND SOLUTIONS TO MY ISSUES.”

– Rodney Hickman, VSLive! San Diego 2022 Attendee

FULL-DAY HANDS-ON LABS *(Separate entry fee required)*

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

Topics covered include:

- ASP.NET Core App with EF Core
- The Human Side of Agile and DevOps
- Blazor

Attendee Requirements:

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

HOL01

Hands-on Lab: Develop an ASP.NET Core App with EF Core in a Day

Intermediate

PHILIP JAPIKSE

Monday, May 15, 9:00am - 6:00pm

Interested in ASP.NET Core and Entity Framework Core, but not sure where to start? Start here with an all-day Hands-on Lab where you will build a complete solution using the latest development technology from Microsoft. You will build a data access library using Entity Framework Core, complete with repos and migrations. Next, you will build an ASP.NET Core web application, leveraging all of the latest that ASP.NET Core has to offer, including Tag Helpers, View Components, Dependency Injection, and more!

You will learn:

- ASP.NET Core Web Applications (MVC)
- EF Core
- Build an application in a day!

Attendee Requirements:

- You must provide your own laptop computer (Windows or Mac) for this hands-on lab.
- All other laptop requirements will be provided to attendees 2 weeks prior to the conference.

HOL02

Hands-On Lab: The Human Side of Agile and DevOps

Intermediate / Advanced

BENJAMIN DAY & ANGELA DUGAN

Monday, May 15, 9:00am - 6:00pm

You have solid DevOps pipelines, the best of breed tooling, your processes are well documented and discoverable, and your team rooms are full of comfy chairs and the tastiest snacks! So why is it still so stinking difficult to meet your commitments and deliver high quality software? If it's not a tooling problem it must be a people problem, and if it's not a people problem it must be a system problem, right? It is easy to say that software delivery would be so easy...if it weren't for all the humans. But why is that?

The technical stuff is easy by comparison. Humans need convincing and explanations and reasons for why they should embrace an Agile mindset, and follow DevOps leading practices, and work on this thing instead of that other more fun thing. If you're in a leadership role, how can you tell if your teams are facing challenges, and what do you do about it? How do you know if your team members are productive? How can you prevent burnout, increase morale, and sustain a high performing team that crushes their commitments? What do we ALL need to know about being truly great team members, and why should we care?

In this workshop, Ben and Angela will connect the strategic, human-oriented reasoning to the tactical 'nuts and bolts' of a successful software organization. We'll discuss process, metrics, communication, all of the typical Agile and DevOps concepts, and instead of focusing on any particular technology or framework, we'll focus on how to help you and the humans around you to be happier, more effective, and truly productive.

You will learn:

- How to level up your communication and feedback to support continuous improvement, and minimize friction and conflict
- How to optimize delivery and maintain a healthy team morale by tracking the right metrics, not just the popular or common ones
- Understanding theories of complexity and constraints, and using that knowledge to manage and adapt to bottlenecks

Attendee Requirements:

- You must provide your own laptop computer (Windows or Mac) for this hands-on lab.
- All other laptop requirements will be provided to attendees 2 weeks prior to the conference.

HOL03

Hands-On Lab: Build Your First Application with Blazor

Introductory to Intermediate

JEFFREY T. FRITZ

Monday, May 15, 9:00am - 6:00pm

Tired of Angular, Vue, and React? Ready for the next generation of web user interface that runs everywhere and you can build with your favorite programming language? In this session, Jeff Fritz is going to introduce you to Blazor - the next generation UI framework from the .NET team. We'll see how Blazor works with Web Assembly, web servers, and hybrid applications to deliver a great experience for your users. Blazor is the framework that allows you to build once and run it everywhere.

Attendee Requirements:

- You must provide your own laptop computer (Windows or Mac) for this hands-on lab.
- All other laptop requirements will be provided to attendees 2 weeks prior to the conference.

“I APPRECIATED HOW INFORMED THE SPEAKERS WERE. THEY COULD REALLY ANSWER A LOT OF QUESTIONS I HAD WITH CONFIDENCE. AND IF THEY COULDN'T, THEY RESEARCHED AND GOT BACK TO ME.”

– VSLive! Austin 2022 Attendee

FULL-DAY WORKSHOPS

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

Topics covered include:

- Azure PaaS
- Microsoft Blazor
- SQL Server

F01

Workshop: Ship Faster, More Securely with Azure PaaS

Intermediate

BRIAN RANDELL & MICKEY GOUSSET

Friday, May 19, 8:00am - 5:00pm

In today's fast-paced business environment, organizations must deliver their applications quickly and securely. Azure Platform-as-a-Service (PaaS) provides a scalable, reliable, and cost-effective solution for developing and deploying web apps, web services, and databases. This workshop will demonstrate how you can leverage Azure PaaS to ship your applications faster and more securely.

In this workshop, you will learn how to build, deploy, and manage web apps, web services, and databases using Azure PaaS with Brian & Mickey. While examples will be presented using .NET 6 & 7 with SQL Server, the principles you'll learn will apply to any modern language and database supported by Azure. You will also learn how to ensure the security of your applications and monitor their performance using Azure PaaS. All of what you see will cover the single developer inner loop using Visual Studio 2022 while you'll see good DevOps practices with GitHub Enterprise Cloud and Azure DevOps Services for the outer team loop.

The workshop will consist of a mix of presentation slides and lots of demos. Brian & Mickey will be available to answer questions and provide guidance throughout the day. By the end of this workshop, you will have a solid understanding of how to use Azure PaaS to build, deploy, and manage web apps, web services, and databases. You will also have a good understanding of how to ensure the security and performance

of your applications and how to use good DevOps practices to streamline your development and deployment processes.

You will learn:

- Attendees will learn how to create and deploy web apps, web services, and databases using Azure PaaS, which provides a scalable, reliable, and cost-effective solution for developing and deploying applications in the cloud
- Attendees will gain knowledge on how to implement security features such as authentication and authorization, as well as secure data in transit and at rest to ensure the security of their applications on Azure PaaS
- Attendees will also learn how to use good DevOps practices like continuous integration and deployment, automation testing and quality control to streamline development and deployment processes for their applications

F02

Workshop: Microsoft Blazor Top to Bottom

Intermediate

JASON BOCK, ALLEN CONWAY & ROCKFORD LHOTKA

Friday, May 19, 8:00am - 5:00pm

Blazor (Browser + Razor) has redefined the current landscape for web developers, allowing C# and .NET back into the modern web development picture. Leveraging WebAssembly to allow running .NET code in the browser, we can use the same C# language on the client and the server to build our modern web applications. At the core of Blazor is the ability to compose our web application using reusable components just like the modern browser frameworks.

Join experts in Blazor, WebAssembly, and enterprise development as they discuss why and when to use Blazor. They will give you everything you need to know to build Blazor apps, use the Razor component model, data and event binding, styling the UI, and building maintainable code. You will learn about Blazor server, WebAssembly, and MAUI hybrid apps, and how to implement authentication and authorization. WebAssembly and Blazor are incredibly powerful technologies and may be the future of web development. Come to this workshop to form your own view on this exciting platform.

You will learn:

- The basics of Blazor app dev and Blazor features
- The various ways to host and run Blazor apps
- How to implement authentication and authorization

F03

Workshop: Developer Dive into SQL Server 2022

Intermediate

LEONARD LOBEL

Friday, May 19, 8:00am - 5:00pm

This full-day workshop will get you up to speed on powerful new features in SQL Server 2022. Lenni will pull no punches as he rips through the most important SQL Server features for developers in this intensive demo-packed tour.

We'll kick things off with the broad multi-platform support across Windows, Linux, and Docker. Learn how SQL Server's ability to run inside Linux containers on both Windows and Mac will revolutionize the way you work with the database engine. Then you'll explore the Intelligent Query Processing (IQP) features, which deliver groundbreaking performance improvements to the query engine. We'll then move on to the latest development platform improvements, including T-SQL enhancements added in SQL Server 2022, machine learning services with R and Python, integrated JSON support, and temporal tables.

Next we'll explore security features, starting with ledger tables. New in SQL Server 2022, ledger utilizes blockchain technology that hashes every transaction, and guarantees tamper evidence in your database. Next, we'll examine dynamic data masking and row-level security. We'll then dig into Always Encrypted and demonstrate support for secure enclaves to enable rich querying over encrypted data. We'll wrap up with the latest PolyBase enhancements to query external data in Azure Blob Storage, Mongo DB, Oracle, and other remote data sources.

You'll learn a ton of new SQL Server features in this information-packed day!

You will learn:

- How to boost developer productivity by running SQL Server inside Linux containers with Docker
- Intelligent Query Processing features, T-SQL enhancements, and modern development platform for machine learning with R and Python
- Discover the newest security features including ledger tables, Always Encrypted with secure enclaves, and the latest data virtualization capabilities with PolyBase

SESSION DESCRIPTIONS BY TRACK

DEVOPS AND BEYOND

DevOps has been called the “second decade of Agile”. We’ve learned much about what it means to be agile and to “do DevOps”, which is as much about culture and mindset as it is about tooling and code. As the world moves into a post-pandemic “new normal”, providing reliable remote access and automation that is secure, easy to access, and readily available is critical to modern teams being successful. Organizations that have thrived over the past few years both embraced and internalized leading DevOps practices and strategies, revolutionizing the way they deliver value to their customers with speed, without sacrificing quality.

As part of an organizational transformation, DevOps starts with a focus on people and better process and then, yes, great products are adopted to increase productivity and reduce friction. DevOps is all about the enablement and acceleration of continuous value delivery. After participating in sessions in this track, you’ll walk away confident in your knowledge about the why, what, and how of modern DevOps. Our DevOps experts will leverage their knowledge and experiences to expose you to the latest tools, strategies, and leading practices.

You’ll find coverage of:

- Hands-on Lab: GitHub Code to Cloud
- Essential DevOps
- Using Azure DevOps to Build and Release to Azure
- GitHub Actions Soup to Nuts
- Protecting yourself against supply chain attacks
- Unit testing and test-driven development (TDD)
- Achieving flow and scale in large organizations

T12

DevOps is Dead, Long Live DevOps!

Intermediate

BRIAN RANDELL

Tuesday, May 16, 1:30 – 2:45pm

You will learn:

- A deeper understanding of the history and evolution of the DevOps movement, from its origins as a set of best practices to its status as a cultural phenomenon
- The challenges facing DevOps in the modern software landscape, including the risk of becoming a buzzword and losing its original meaning, and the need to adapt to new technologies and practices
- Practical ways to apply DevOps principles to your own work, including how to foster a DevOps culture, how to implement automation and continuous delivery practices, and how to stay up-to-date with the latest DevOps trends and best practices

T15

GitHub Actions - Soup to Nuts

Intermediate / Advanced

MICKEY GOUSSET

Tuesday, May 16, 3:00 – 4:15pm

You will learn:

- What GitHub Actions is
- How to create custom actions and reusable workflows
- How to integrate GitHub Actions with other systems

W04

I Love YAML: Using Azure DevOps to Build and Release to Azure

Intermediate / Advanced

BENJAMIN DAY

Wednesday, May 17, 8:00 – 9:15am

You will learn:

- What is YAML and YAML-based pipelines? How is it the same/different from JSON-based pipelines?
- How do you handle multiple environments?
- How do you use approvals to control deployments to environments?

W18

GitHub Actions: Beyond CI/CD

Intermediate

ROB BOS

Wednesday, May 17, 2:30 – 3:45pm

You will learn:

- GitHub Actions can do more than CI/CD
- Real-life examples of automation

W22

Protect Yourself against Supply Chain Attacks

Intermediate / Advanced

ROB BOS

Wednesday, May 17, 4:00 – 5:15pm

You will learn:

- Why do we need to protect ourselves?
- What things do we need to think about?
- A framework to guide you through improving your security stance

TH05

Protect your Code with GitHub Security Features

Intermediate / Advanced

ROB BOS

Thursday, May 18, 9:30 – 10:45am

You will learn:

- Commit signing
- Dependabot
- Secret scanning
- Code scanning using CodeQL

SESSION DESCRIPTIONS BY TRACK *(continued)*

TH13

Too Late for TDD? Start Test Eventually Development Now

Introductory / Intermediate

JIM WOOLEY

Thursday, May 18, 1:15 – 2:30pm

You will learn:

- The differences between unit testing, integration testing, and functional testing and when to use each
- How to start adding testing strategies against existing code bases
- Discover how and when to modify your code to make it more testable including refactoring to support injection and mocking

TH17

Flow, the Universe and Everything

Introductory

CLINT EDMONSON

Thursday, May 18, 2:45 – 4:00pm

You will learn:

- Understand the importance of flow in development
- See examples of flow across industries and disciplines
- Apply lessons and takeaways to daily development practices

“THE INSTRUCTORS WERE ALL AWESOME! REALLY ENJOY LISTEN TO THEM SPEAK ON TOPICS THEY ARE PASSIONATE ABOUT.”

– Jose Medina,
VSLive! Microsoft HQ
2022 Attendee



CLOUD, CONTAINERS, AND MICROSERVICES

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

This track includes coverage of the following:

- Workshop: Ship Faster, More Securely with Azure PaaS
- WebAssembly in the Cloud
- Use OpenAPI to document and generate your services and clients
- Introduction to Actor-based Development with Project Orleans
- Fast Focus: What Manifests are These?
- From Core to Containers to Orchestration - Modernizing my Compute
- An Infrastructure as Code Bake-off, comparing ARM, Terraform and Bicep

T11

WebAssembly in the Cloud

Intermediate

JON FLANDERS

Tuesday, May 16, 1:30 – 2:45pm

You will learn:

- Understand how WebAssembly can be used outside of

the browser

- Recognize use-cases for WebAssembly in your server-side solutions
- Be able to determine the best approach for deploying WebAssembly outside of the browser

T14

Use OpenAPI to Document and Generate Your Services and Clients

Introductory

JON FLANDERS

Tuesday, May 16, 3:00 – 4:15pm

You will learn:

- The basics of how OpenAPI works
- Understand the power of OpenAPI code generation
- Be able to integrate OpenAPI and code generation into your own development pipeline

W13

Fast Focus: What Manifests are These?

Introductory

MIKE BENKOVICH

Wednesday, May 17, 2:00 – 2:20pm

You will learn:

- What is a manifest and
- How do you work with them
- What tools are available to make working with Kubernetes manifests easier?

W17

From Core to Containers to Orchestration - Modernizing my Compute

Intermediate

MIKE BENKOVICH

Wednesday, May 17, 2:30 – 3:45pm

You will learn:

- What's compelling about the new .NET framework
- How containerization works
- When and why to go to orchestration

SESSION DESCRIPTIONS BY TRACK *(continued)*

W21

An Infrastructure as Code Bake-off, Comparing ARM, Terraform, and Bicep

Intermediate

MIKE BENKOVICH

Wednesday, May 17, 4:00 – 5:15pm

You will learn:

- What is Bicep and how is it related to ARM
- How does Terraform work and compare to ARM and Bicep
- What other tools are out there and how do they compare



AI, DATA, AND MACHINE LEARNING

Data has once again become one of the hottest topics in our industry and ecosystem. SQL Server 2022 became generally available in November, Azure SQL Database, including Managed Instance, continually improves, Cosmos DB continues to gain momentum; data warehouse and data lake skills grow ever more important, working with AI responsibly is super-relevant, and Entity Framework remains front-and-center in the modern .NET world. There's no room for anyone to be complacent when it comes to data, and we're here to keep you up to date.

This track includes coverage of the following:

- Azure Data Lakes and Delta Lakes
- Designing Azure Modern Data Warehouse Solutions
- Power BI and Azure Databricks SQL
- Fast Focus: Power BI (Metrics or Datamarts)
- Responsible AI
- Building Event-Driven Microservices with the Azure Cosmos DB Change Feed
- What's New in SQL Server 2022
- Getting Your Story Straight with Data Visualizations
- Making the Leap from Reporting to Data Analysis
- Workshop: Developer Dive into SQL Server

T03

Azure Data Lakes and Delta Lakes

Introductory / Intermediate

KEN MUSE

Tuesday, May 16, 8:00 – 9:15am

You will learn:

- A basic understanding of data lakes and how NoSQL data is organized
- Data organization and partitioning with the Zone and Medallion patterns
- What is a Delta Lake, and when and why to utilize that technology

T07

Designing Azure Modern Data Warehouse Solutions

Introductory / Intermediate

KEN MUSE

Tuesday, May 16, 9:30 – 10:45am

You will learn:

- Define and understand how to implement the MDW architecture pattern
- How to determine appropriate Azure SQL and NoSQL solutions for a workload
- Understand how to ingest and report against high volume data

W07

Power BI and Azure Databricks SQL: BI on Big Data for Real

Intermediate

ANDREW BRUST

Wednesday, May 17, 9:30 – 10:45am

You will learn:

- How to use Databricks SQL Workspaces
- Deployment of, and connecting Power BI to, Databricks SQL Warehouses
- Background on performance optimizations in the Proton engine
- Use of Power BI composite models for efficient big data querying

W10

Fast Focus: Power BI Metrics: Managing KPIs and Scorecards for Yourself and Your Team

Introductory / Intermediate

ANDREW BRUST

Wednesday, May 17, 1:30 – 1:50pm

You will learn:

- What KPIs and OKRs are, and when they're useful
- The basics of Power BI scorecarding and different types of scorecards
- How to build and deploy Power BI scorecards, and analyze their output

TH03

Responsible AI

Intermediate

VERONIKA KOLESNIKOVA

Thursday, May 18, 8:00 – 9:15am

You will learn:

- The responsible AI principles
- Understand the tools for applying those principles to ML solutions
- Best practices for applying the principles

TH06

Building Event-Driven Microservices with the Azure Cosmos DB Change Feed

Advanced

LEONARD LOBEL

Thursday, May 18, 9:30 – 10:45am

You will learn:

- About the change feed in Azure Cosmos DB
- Explore event-driven microservices enabled by leveraging the change feed
- Watch live demos using the Change Feed Processor library with Azure Functions

SESSION DESCRIPTIONS BY TRACK *(continued)*

TH10

What's New for Developers in SQL Server 2022

Intermediate

LEONARD LOBEL

Thursday, May 18, 11:00am – 12:15pm

You will learn:

- How to secure your data using ledger tables
- How to apply granular permissions to dynamic data masking
- How to leverage new T-SQL enhancements

TH14

Getting Your Story Straight with Data Visualizations

Introductory

STACIA VARGA

Thursday, May 18, 1:15 – 2:30pm

You will learn:

- How telling a story is different from creating a report
- Explore the vocabulary and grammar of data visualization
- Evaluate the goal of your data story and choose appropriate visualizations

TH18

Making the Leap from Reporting to Data Analysis

Introductory / Intermediate

STACIA VARGA

Thursday, May 18, 2:45 – 4:00pm

You will learn:

- Review the basic process of data analysis
- How to reveal and explore relationships in your data
- How to apply simple statistics to your data for deeper insights



DEVELOPING NEW EXPERIENCES

The expectations around “user experience” are being upended right before our eyes. In today’s world you need to understand not only graphical interactions with keyboard, mouse, touch, and stylus, but also gesture, 3D, mixed-reality, and more. Fortunately, we’ve got you covered with content for rich multi-platform apps to the latest for Windows developers and even bots for good measure.

This track includes coverage of the following:

- Making Design Pay
- Deep Dive: MAUI .NET
- Busy Developer’s Guide to Flutter
- Using Blazor in MAUI
- ML.NET in Maui
- Practical Internet of Things for the Microsoft Developer
- Create Intelligent Bots with the Power Platform, Azure, and Cognitive Services

T04

Making Design Pay

Introductory / Intermediate

BILLY HOLLIS

Tuesday, May 16, 8:00 – 9:15am

You will learn:

- To estimate Return on Investment for UX design
- Find ways to discuss doing better design with managers above you
- See how to prioritize design in development projects

T10

Deep Dive with MAUI

Intermediate

SAM BASU

Tuesday, May 16, 1:30 – 4:15pm

Let’s look under the surface of the future with .NET MAUI. Architectural changes make things more consistent in .NET MAUI – app bootstrapping, resource sharing, dependency injection, support for multiple design patterns & catering to mobile/desktop platforms.

W02

Bringing the Web to Native Applications with Blazor Hybrid

Introductory to Intermediate

JEFFREY T. FRITZ

Wednesday, May 17, 8:00 - 9:15am

In this session, .NET Program Manager Jeff Fritz will show you how to take your web development skills and deploy them natively on your favorite devices without rewriting your application.

W06

Busy Developer’s Guide to Flutter

Intermediate

TED NEWARD

Wednesday, May 17, 9:30 – 10:45am

You will learn:

- The basics of Dart and Flutter
- Different approaches to coding
- Take away a different way of thinking about building mobile apps

W12

Fast Focus: Using Blazor in MAUI

Introductory

ROCKFORD LHOTKA

Wednesday, May 17, 2:00 – 2:20pm

SESSION DESCRIPTIONS BY TRACK *(continued)*

You will learn:

- How to create a MAUI Blazor project
- How Blazor operates within MAUI
- How Blazor can leverage MAUI to access native capabilities

TH08

Is there ML.NET in MAUI?

Introductory / Intermediate

VERONIKA KOLESNIKOVA

Thursday, May 18, 11:00am – 12:15pm

You will learn:

- Understand the basics of ML.NET
- Practical knowledge about Xamarin to MAUI migration
- Practical knowledge about adding ML.NET to a MAUI application

TH12

Practical Internet of Things for the Microsoft Developer

Introductory / Intermediate

ERIC D. BOYD

Thursday, May 18, 1:15 – 2:30pm

You will learn:

- Overview of Internet of Things
- Getting started with Azure IoT services
- How to prototype IoT devices and sensors

TH16

Create Intelligent Bots with the Power Platform, Azure, and Cognitive Services

Introductory / Intermediate

ERIC D. BOYD

Thursday, May 18, 2:45 – 4:00pm

You will learn:

- Overview of conversational bots
- Getting started building conversational bots with Azure and PVA
- How to design great conversational experiences



TECHNICAL EXCELLENCE AND LEADERSHIP SKILLS

Highly motivated people who feel connected, who feel valued, and who get to work on challenging problems love what they do, feel more energized and fulfilled by their work, and deliver exceptional solutions and products. Who doesn't want that for themselves, for their teammates, or for the people who work for them? Modern software companies that experience the greatest successes invest in their people's leadership skills starting with apprentices, expanding into all roles within software teams, up through directors, all the way to their C-suite. Strong, effective leaders cultivate cultures where respect, mentorship, and support are central to how the company operates regardless of their official title or respective place within the organization.

Whether you're a leader by title or by necessity, or an individual contributor with leadership in your future, the skills and practices shared in this track will enable you to be an effective, respected, and inspiring leader. You will learn how to have more productive and positive interactions with stakeholders, other team members, direct reports, even your own manager. Whether you're an experienced leader or an aspiring one, we have something for you in the Technical Excellence and Leadership Skills track.

Topics in this track include:

- How to troubleshoot and save a failing project
- User Experience Research and Design
- Improving Agility through close collaboration with clients
- Innovative problem solving
- Laws, Patterns, and Idioms of Object-Oriented programming
- Data driven decision making
- Facing uncomfortable truths of software development
- Choosing metrics with your team to foster experimentation and growth
- Workshop: The Human Side of Agile and DevOps

W14

Fast Focus: WTF UX - UX Research and Design AMA

Intermediate

DEBBIE LEVITT

Wednesday, May 17, 2:00 – 2:20pm

You will learn:

- Working smarter and better with UX.
- UX... WTF?
- Anything you want to ask!

W16

Improving Agility by Using Customers' Definitions of "Quality" and "Done"

Intermediate

DEBBIE LEVITT

Wednesday, May 17, 2:30 – 3:45pm

You will learn:

- Put the "evidence-based" in evidence-based decision making
- Working with UX Researchers and Designers in an Agile environment
- Improving customer outcomes

SESSION DESCRIPTIONS BY TRACK *(continued)*

W20

How to Fix a Failing Project

Intermediate / Advanced

BENJAMIN DAY

Wednesday, May 17, 4:00 – 5:15pm

You will learn:

- How unclear priorities and too much Work in Progress (WIP) can get in your way
- How to use simple metrics to measure what's going on: Flow Metrics, Cycle Time, and Lead Time
- Communication techniques for working with grumpy stakeholders and bosses

TH04

How to Increase Innovative Problem Solving in Teams

Introductory

AMBER VANDERBURG

Thursday, May 18, 8:00 – 9:15am

You will learn:

- How to identify the purpose of their problem solving to be more effective in their innovation
- Tools such as TRIZ to encourage more creativity
- How to collaborate with others to create innovative solutions

TH07

Advanced OOP - Laws, Patterns & Idioms

Intermediate

CLINT EDMONSON

Thursday, May 18, 9:30 – 10:45am

You will learn:

- Understand advanced OOP patterns
- See examples of these patterns in practice
- Learn how and when to use them in your own development

TH11

Data Driven Decision Making

Introductory

AMBER VANDERBURG

Thursday, May 18, 11:00am – 12:15pm

You will learn:

- How to better collect and organize data points
- How to accurately interpret data points
- How to communicate data clearly

TH15

Getting Started with Design Thinking: A Guide for Developers and Managers

Introductory

BILLY HOLLIS

Thursday, May 18, 1:15 – 2:30pm

In this session, we'll cover the various levels of design effort. Attendees will get tips on applying design thinking to their own projects, from basic do's and don'ts all the way through facilitating organization-spanning innovation.

TH19

Measuring Up! How to Choose Agile Metrics Your Team Won't Hate

Introductory / Intermediate

ANGELA DUGAN

Thursday, May 18, 2:45 – 4:00pm

You will learn:

- Why it is so difficult to identify meaningful metrics in the software world
- The importance of developing a healthy "metrics mindset"
- The best types of quality-focused team metrics to focus on in an agile organization

THE CORE OF .NET

The heart of the Microsoft development experience has been the .NET Framework. But it's changed a lot in the era of .NET Core. And now we have a single, unified version, .NET 6. You need to understand these major changes in the platform, not to mention the cool features being added to C#. These are the foundation-level topics you need to know for success in the Microsoft development world.

Topics in this track include:

- Useful New-ish features in .NET/C#
- Be more productive with .NET using GitHub Copilot and GitHub Codespaces
- Busy Developer's Guide to Auth-n-Auth
- Fast Focus: Getting .NET Interactive Notebooks
- What's New in .NET 7 APIs
- Entity Framework performance monitoring and tuning
- Building cloud-ready applications in .NET
- Dependencies Demystified

T02

Useful New-ish Features in .NET/C#

Introductory / Intermediate

DEBORAH KURATA

Tuesday, May 16, 8:00 – 9:15am

You will learn:

- About some of the new-ish features in C#
- About some of the new-ish features in .NET
- How to leverage these features in your current projects

SESSION DESCRIPTIONS BY TRACK *(continued)*

T06

Be More Productive with .NET Using GitHub Copilot and GitHub Codespaces

Introductory / Intermediate

BRIAN RANDELL

Tuesday, May 16, 9:30 – 10:45am

You will learn:

- The basics of GitHub Copilot and how it can be used to improve productivity
- How to set up and use Codespaces for cloud-hosted development in .NET, and how it integrates with GitHub for collaboration with other developers
- Discover practical tips and best practices for using Copilot and Codespaces effectively in real-world scenarios

W03

Busy Developer's Guide to Auth-n-Auth

Intermediate

TED NEWARD

Wednesday, May 17, 8:00 – 9:15am

You will learn:

- Demystify some security terminology and concepts
- How and when each principle applies
- Build a strong mental model of how/when/why to secure logins

W08

Dependencies Demystified

Intermediate

JASON BOCK

Wednesday, May 17, 9:30 – 10:45am

You will learn:

- Gain insight into what dependencies are
- See how containers simplify and empower your applications
- How to use containers effectively in modern .NET applications

W11

Fast Focus: Getting .NET Interactive Notebooks

Introductory

JASON BOCK

Wednesday, May 17, 1:30 – 1:50pm

You will learn:

- See what .NET Interactive Notebooks are
- Understand how .NET works in notebooks
- Gain insight into .NET integration in Jupyter

W19

What's New in .NET 7 APIs

Intermediate

JASON BOCK

Wednesday, May 17, 4:00 – 5:15pm

You will learn:

- See what functionality .NET provides
- Understand new features in the latest version of .NET
- Gain insight in staying on top of new runtime versions

TH02

Building Cloud-Ready Applications in .NET

Intermediate

LAYLA PORTER

Thursday, May 18, 8:00 – 9:15am

You will learn:

- What it means to be cloud ready
- Architecting systems
- Libraries supporting cloud-readiness

TH09

Entity Framework Performance Monitoring and Tuning

Intermediate

JIM WOOLEY

Thursday, May 18, 11:00am – 12:15pm

You will learn:

- Discover typical performance issues based on real-life examples and how to fix them
- Discover how to profile your database interactions through Entity Framework
- How different versions of EF generate different queries and how you need to modify your data access strategy as a result



SESSION DESCRIPTIONS BY TRACK *(continued)*



FULL STACK WEB DEVELOPMENT

Web development has become the dominant approach for building enterprise software. To provide your best on every project, you need to understand the server and browser client worlds. On the server, there's ASP.NET using .NET 6 with MVC, Razor Pages, and support for building services. The browser client is evolving rapidly, with constant changes and updates to JavaScript, TypeScript, Angular, and other related frameworks. But more than this, there's now Blazor Server and Blazor Client (aka WebAssembly) and the ability to run other languages natively in the browser. Your need to keep up to date with all these technologies has never been greater, and we're here to give you the knowledge you need!

Topics in this track include:

- Getting Up and Running with Modern Angular
- Introduction to Blazor
- RxJS in Angular: Working with Data
- ASP.NET Basics for Experts
- Building Enterprise Blazor Apps Using CSLA .NET
- Fast Focus: JavaScript Framework/Library Showdown
- TypeScript: Moving Beyond the Basics
- ASP.NET Core, beyond the basics
- Web Services with ASP.NET Core Deep Dive
- Workshop: Microsoft Blazor Top to Bottom

T01

Getting Up and Running with Modern Angular

Introductory

ALLEN CONWAY

Tuesday, May 16, 8:00 – 9:15am

You will learn:

- The fundamentals of the Angular framework and why you would use it for modern web development, as well as how it fits in front of your existing back-end implementation
- How to create and run an Angular application using the CLI (Command Line Interface)
- The fundamentals of Angular applications by building components, views, and services

T05

RxJS in Angular: Working with Data

Introductory / Intermediate

DEBORAH KURATA

Tuesday, May 16, 9:30 – 10:45am

You will learn:

- Understand what reactive programming means
- Tips and techniques for implementing reactive programming in Angular
- Leverage reactive programming for working with data

T09

Introduction to Blazor

Introductory / Intermediate

ROCKFORD LHOTKA

Tuesday, May 16, 1:30 – 2:45pm

You will learn:

- How Blazor, WebAssembly, and .NET combine to enable this app platform
- How to build server-side Blazor and Blazor WebAssembly apps
- How to use Blazor UI framework features such as UI components, data binding, routing, and authorization

T13

Beyond the Basics – Building Fast and Reusable Code with Blazor

Introductory to Intermediate

JEFFREY T. FRITZ

Tuesday, May 16, 3:00 - 4:15pm

Join Microsoft's Jeff Fritz from the .NET team as we learn about building components and even writing a few unit tests for Blazor.

W01

ASP.NET Basics for Experts

Intermediate / Advanced

LAYLA PORTER

Wednesday, May 17, 8:00 – 9:15am

You will learn:

- Good design principles
- Building resilient systems
- Building maintainable systems

W05

Building Enterprise Blazor Apps Using CSLA .NET

Intermediate

ROCKFORD LHOTKA

Wednesday, May 17, 9:30 – 10:45am

You will learn:

- How Blazor can be used to build end-user experiences for the enterprise
- How CSLA .NET helps you develop maintainable, reusable, cross-platform business logic
- How to leverage your business logic on the server with Linux containers

SESSION DESCRIPTIONS BY TRACK *(continued)*

W09

Fast Focus: JavaScript Framework/Library Showdown

Introductory

ALLEN CONWAY

Wednesday, May 17, 1:30 – 1:50pm

You will learn:

- About the main frameworks and libraries for modern web client development
- About the main differences between Angular, React, and Vue
- About what backing factors will help guide the way to making a good decision about the framework and library chosen

W15

TypeScript: Moving Beyond the Basics

Intermediate / Advanced

ALLEN CONWAY

Wednesday, May 17, 2:30 – 3:45pm

You will learn:

- About advanced TypeScript language features available beyond the basics
- How to leverage the building blocks of TypeScript and build upon them with advanced features to make web client development more powerful
- About additional TypeScript language features like advanced types, decorators, mixins, symbols, generics, iterators, and declaration merging

TH01

Deep Dive: Web Services with ASP.NET Core Deep Dive

Intermediate

PHILIP JAPIKSE

Thursday, May 18, 8:00 – 10:45am

You will learn:

- Foundations of ASP.NET Core
- Building RESTful services with ASP.NET Core
- Documenting services with swagger



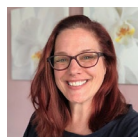
CONFERENCE CHAIRS & SPEAKERS

CONFERENCE CHAIRS



Andrew Brust
Founder & CEO,
Blue Badge Insights

Visual Studio Live!
Conference Co-Chair



Angela Dugan
Solutions Director,
3Cloud Solutions

Visual Studio Live!
Conference Co-Chair



Rockford Lhotka
VP of Strategy,
Xpirit

Visual Studio Live!
Conference Co-Chair



Brian Randell
Product Marketing Director,
GitHub

Visual Studio Live!
Conference Co-Chair

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Developer Advocate,
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Allen Conway
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Mickey Gousset
DevOps Architect,
GitHub



Rockford Lhotka
VP of Strategy, Xpirit



Amber Vanderburg
Founder,
Pathwayz Group



Mike Benkovich
Developer, Business
Owner, Consultant,
Cloud Architect,
Instructor



Benjamin Day
Author, Trainer,
Developer



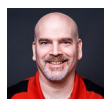
Billy Hollis
Developer. Designer.
Speaker. Author.



Leonard Lobel
CTO,
Sleek Technologies, Inc.



Stacia Varga
Consultant, Educator,
and Author



Jason Bock
Developer Advocate,
Rocket Mortgage



Angela Dugan
Solutions Director,
3Cloud Solutions



Philip Japikse
Developer, Coach,
Author, Teacher



Ken Muse
Senior DevOps
Architect, GitHub



Jim Wooley
Solution Architect,
Slalom Consulting



Rob Bos
DevOps Consultant,
Xpirit



Clint Edmonson
Director of Software
Engineering, Ascendle



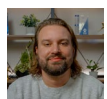
Veronika Kolesnikova
Sr. Software Engineer,
Liberty Mutual



Ted Neward
Principal,
Neward & Associates



Paul Yuknewicz
Head of Product, Azure
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Eric D. Boyd
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Debbie Levitt
CXO, Delta CX



Brian Randell
Product Marketing
Director, GitHub

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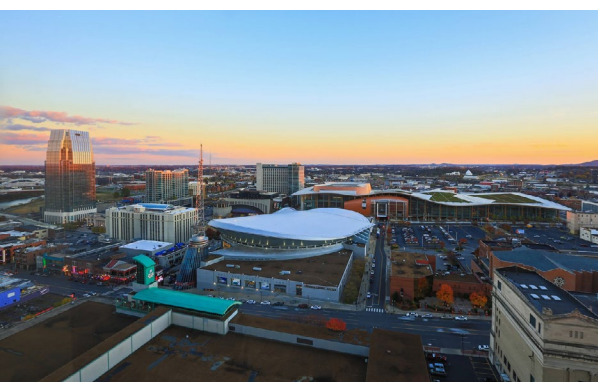
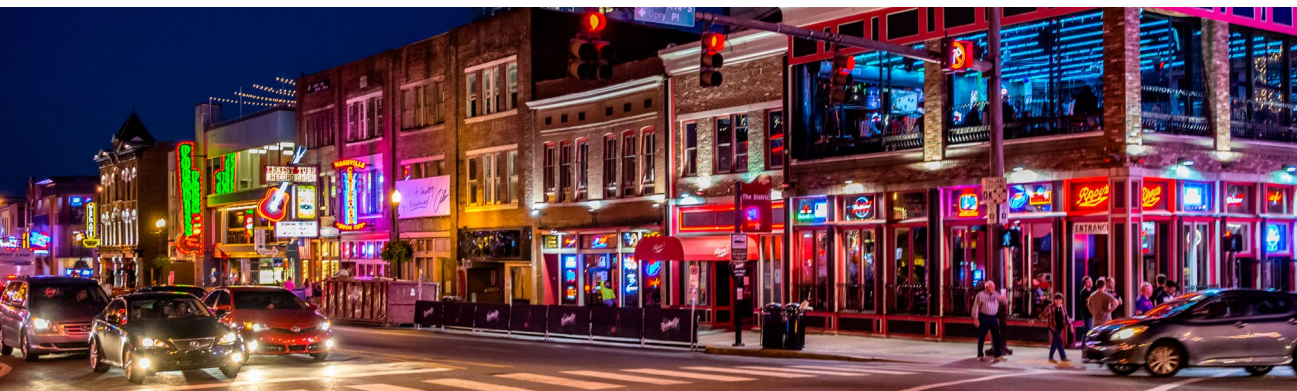


Visual Studio
MAGAZINE

“I LOVED THE NUGGETS OF INFORMATION THAT I CAN DIRECTLY APPLY TO MY WORK STARTING MONDAY.”

– VSLive! Microsoft HQ 2022 Attendee

VENUE & TRAVEL



LOCATION

RENAISSANCE NASHVILLE HOTEL

Home to All Visual Studio Live! Sessions & Activities

Take advantage of the \$255.00* room rate by April 14, 2023

RENAISSANCE NASHVILLE HOTEL

611 Commerce Street
Nashville, TN 37203

Special attendee rate: \$255.00*

Book by: April 14, 2023

[Book your room online](#) for the Visual Studio Live! Room Block. The offer is subject to room availability, so make sure to book early.

Renaissance Nashville Hotel rooms booked within the Visual Studio Live! room block include:

- Unlimited local phone calls
- Complimentary access to the Fitness Center
- In-room wireless internet access

**The special attendee room rate is based on single or double occupancy. The room rate does not include applicable state, local, and occupancy taxes. Rooms are subject to availability.*



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Take advantage of all the city of Nashville has to offer. [Explore](#) and find your Nashville inspiration to start planning your trip today!

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CONFERENCE PACKAGES			
Every Conference Package grants you access to every Keynote, Session, Breakfast, Lunch, and Welcome Reception	SUPER EARLY BIRD UNTIL MARCH 10	EARLY BIRD UNTIL APRIL 14	STANDARD UNTIL MAY 15
5-DAY CONFERENCE PACKAGE + Monday HOL + Friday Workshop (Monday - Friday)	\$2,700	\$2,800	\$3,100
4-DAY CONFERENCE PACKAGE + Friday Workshop (Tuesday - Friday)	\$2,200	\$2,300	\$2,600
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FULL DAY HANDS-ON LAB (Monday Only)	\$650	\$700	\$750
FULL DAY WORKSHOP PASS (Friday Only)	\$650	\$650	\$650

ADD THE HOTEL PACKAGE

At the Renaissance Nashville Hotel

5 DAY HOTEL PACKAGE*

\$1,500

Check In: Sun, May 14 | Check Out: Fri, May 19

4 DAY HOTEL PACKAGE*

\$1,200

Check In: Mon, May 15 | Check Out: Fri, May 19

3 DAY HOTEL PACKAGE*

\$900

Check In: Mon, May 15 | Check Out: Thur, May 18

* The Hotel Package includes applicable state, local and occupancy taxes.

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Every Conference Package grants you access to every Keynote, Session, Breakfast, Lunch, and Welcome Reception	SUPER EARLY BIRD UNTIL MARCH 10	EARLY BIRD UNTIL APRIL 14	STANDARD UNTIL MAY 15
5-DAY CONFERENCE PACKAGE + Monday HOL + Friday Workshop (Monday - Friday)	\$2,400	\$2,500	\$2,800
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3 DAY CONFERENCE PACKAGE (Tuesday-Thursday)	\$1,600	\$1,600	\$1,600

"I LIKED THAT THE ATTENDEE LIST WAS NOT MONSTROUS. ALLOWED FOR ENOUGH NETWORKING BUT ALSO ENOUGH FOCUS FROM PRESENTERS."

– VSLive! San Diego 2022 Attendee

MORE DISCOUNTS

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UPCOMING 2023 CONFERENCES




**Visual Studio Live!
Microsoft HQ**
July 17-21, 2023
Microsoft Conference
Center, Redmond, WA/ Hyatt
Regency Bellevue

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**TechMentor
Microsoft HQ**
July 17-21, 2023
Microsoft Conference
Center, Redmond, WA/
Hyatt Regency Bellevue

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**Visual Studio Live!
San Diego**
August 7-11, 2023
Sheraton San Diego Hotel
& Marina

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**Visual Studio Live! /
Live! 360 Orlando**
November 12-17, 2023
Loews Royal Pacific Resort at
Universal Orlando,
Orlando, FL

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