# My backpack



# Microsoft Build | May 22 - 24, 2024

Below are the items you've added to your backpack. You can add notes and personalize this document to create a helpful summary of your time with us at Microsoft Build. Be sure to come back after the event and download your backpack to get refreshed links to presentations, recordings and more.

Go to Microsoft Build | May 21-23, 2024 | Seattle and Online

# Sessions

Wednesday, May 22 at 2:00 AM Australian Eastern Standard Time

# Microsoft Build opening keynote

Join Satya Nadella, Rajesh Jha, and Kevin Scott to learn how this era of AI will unlock new opportunities, transform how developers work and drive business productivity across industries.

Speakers: Satya Nadella, Kevin Scott, Rajesh Jha

Location: Level 2, Flex Hall C1

Wednesday, May 22 at 4:30 AM Australian Eastern Standard Time

# **Developer's Guide to Customizing Microsoft Copilot**

Kickstart your Build journey in developing Copilot extensions at this essential session. Learn to navigate the development landscape with a focus on customization through plugins, Graph connectors, and your own copilots. You will also learn when to customize vs. build your own. This foundational breakout is your gateway to maximizing Copilot's potential, paving the way for advanced sessions at Build.

Speakers: Barnam Bora, Jeremy Thake

Location: Level 0, Exhibit Hall 1

Wednesday, May 22 at 6:00 AM Australian Eastern Standard Time

# **Inside AI Security with Mark Russinovich**

Join Mark Russinovich to explore the landscape of AI security, focusing on threat modeling, defense tactics, our red teaming approaches, and the path to confidential AI. You will learn about various kinds of attacks in AI systems and our defenses, such as backdoors, poison data, prompt injection attacks, and more.

Speakers: Mark Russinovich, Mark Russinovich

Location: Level 0, Exhibit Hall 1

Wednesday, May 22 at 7:15 AM Australian Eastern Standard Time

# Build apps from the cloud with Microsoft Dev Box, Visual Studio & more

Learn how to unify ready-to-code development environments with best-in-class dev tools to deliver an unparalleled coding experience for building intelligent applications and more. Give developers the flexibility to use the tools they want within IT guardrails and enable self-service by integrating Microsoft Dev Box with top-tier developer tools like Visual Studio and GitHub Copilot. Plus, streamline test environment provisioning with Azure Deployment Environments.

Speakers: Anthony Cangialosi, Denizhan Yigitbas

Location: Level 0, Exhibit Hall 2A

**Resources:** 

Accelerate Development

#### Wednesday, May 22 at 7:15 AM Australian Eastern Standard Time

#### **Developer experience improvements in Windows**

The Windows team has been listening to developers and has used that feedback to build features in the tools you love: Windows Subsystem for Linux, WinGet, Windows Terminal, Dev Home and PowerToys. Come learn about Sudo for Windows, the configurability and access to dev environments and power user settings in Dev Home, AI feature developments, and much more. We may even have a few new surprises to share to help you be more productive on Windows.

Speakers: Kayla Cinnamon, Sharla Soennichsen

Location: Level 4, Room 420

Wednesday, May 22 at 8:30 AM Australian Eastern Standard Time

#### **Developer deep dive on building plugins for Microsoft Copilot**

If you have an API you have most of the ingredients for building a plugin for Microsoft Copilot. In this session you'll have a comprehensive understanding on how to build plugins with Visual Studio Code and how these extend Microsoft Copilot and your own copilots to present a refined experience to users.

Speakers: Bob German, David Rousset

Location: Level 0, Exhibit Hall 1

Wednesday, May 22 at 9:45 AM Australian Eastern Standard Time

**Platform Engineering: Creating Scalable and Resilient Systems** 

Organizations have diverse application estates that lead to operations teams managing variable application stacks and complex integrations that are error-prone and difficult to re-use. This session covers platform engineering best practices so you can provide development teams with a consistent and automated experience that empowers them to ship new functionality quickly, securely, and use cloud services as efficiently as possible.

Speakers: Mark Weitzel

Location: Level 3, Room 325

Thursday, May 23 at 1:30 AM Australian Eastern Standard Time

## Next generation AI for developers with the Microsoft Cloud

Join Scott Guthrie and leaders across Microsoft to learn how you can build the secure and responsible AI solutions of the future with the foundation of the Microsoft Cloud. Featuring a fireside chat with John Lambert and Julia Liuson to learn what you can do to create secure solutions in today's threat landscape.

Speakers: Scott Guthrie, Charles Lamanna, John Lambert, Julia Liuson

Location: Level 2, Flex Hall C2

Thursday, May 23 at 3:30 AM Australian Eastern Standard Time

# **Understanding cloud powered development environments**

The cloud brings a wealth of options for development environments. No longer do you wait in line for a locked down machine to be handed to you from IT. Now you can get instant access to the latest, full powered hardware running in the cloud right next to your source code and CI/CD servers. But which is the right option for you? In this session, we will get hands-on with Microsoft Dev Box and GitHub Codespaces, and explain the benefits of these different options.

Speakers: Jason Cook, Craig Peters

Location: Level 4, Room 425

#### **Resources:**

<u>Collection: Accelerate Developer Productivity with GitHub and Azure for</u> Developers

Collection: Secure Developer Platforms with GitHub and Azure

Collection: Microsoft Developer Tools @ Build 2024

GitHub Features - check out all the GitHub features in one place

GitHub Certifications

#### Thursday, May 23 at 4:45 AM Australian Eastern Standard Time

# Secure your Intelligent Applications with Microsoft Entra

Join this session to learn how to automatically setup authentication for your intelligent apps, and how to add access control to your app and data. See how to register your AI apps via Microsoft Graph API or Bicep and discover best practices for token validation and refresh with MSAL libraries. We'll walk through how to choose the right OAuth flows for server-side or Single-page applications, use App Service's built-in authentication and filter output based on the authenticated user.

Speakers: Pamela Fox, Matt Gotteiner

Location: Level 4, Room 420

#### Thursday, May 23 at 6:00 AM Australian Eastern Standard Time

# **Demystify cloud-native development with .NET Aspire**

Explore the groundbreaking .NET Aspire technology stack designed for cloud-native development. We'll explore the Orchestration, Components, Tooling and more. We'll even show you how to integrate the Azure Open AI component to add intelligent functionality to your distributed services. Speakers: Damian Edwards, David Fowler

Location: Level 0, Exhibit Hall 2A

#### Thursday, May 23 at 7:15 AM Australian Eastern Standard Time

#### .NET Aspire development on any OS with the Visual Studio family

Explore the core features of .NET Aspire and how it enhances the developer experience for building cloud-native applications. This session will demonstrate building .NET Aspire apps with Visual Studio and VS Code, so you can choose the best tool for your workflow. We'll then cover Azure Developer CLI (AZD) integration and the "azd up" experience, showcasing how .NET Aspire and AZD work together to seamlessly move your locally-running app to the cloud!

Speakers: Wendy Breiding, Brady Gaster

Location: Level 0, Exhibit Hall 2A

#### Thursday, May 23 at 8:30 AM Australian Eastern Standard Time

# Design and build multi-tenant SaaS apps at scale with Azure Cosmos DB

Learn how to design and optimize multi-tenant SaaS applications using Azure Cosmos DB. This session will explore key design considerations related to tenant isolation, cost optimization, and global distribution. Whether you're dealing with a high volume of small B2C tenants or a low volume of highly skewed B2B tenants, we've got you covered. Real-world examples from innovative ISVs like Kinectify will provide practical insights. Don't miss this opportunity to enhance your SaaS architecture.

Speakers: Tara Bhatia, Michael Calvin, Deborah Chen

Location: Level 4, Room 425

#### Thursday, May 23 at 8:30 AM Australian Eastern Standard Time

## Scott and Mark learn Al

Join Scott Hanselman and Mark Russinovich as they use AI tools to make smarter apps on Windows. You will learn how to use AI in your app, consume models both local and in the cloud, and how to use LLMs to make your apps even more awesome for users. They may even clean up Scott's messy desktop that has been bothering Mark for some time now.

**Speakers:** Mark Russinovich, Mark Russinovich, Scott Hanselman, Scott Hanselman, Scott Hanselman, Scott Hanselman

Location: Level 2, Flex Hall C2

#### Thursday, May 23 at 9:45 AM Australian Eastern Standard Time

#### How GitHub builds GitHub on GitHub

GitHub is the home for all developers. This is no different inside GitHub, where our own passionate group of engineers use our services to build and deliver secure software that the next 100M developers will love. Join us to explore how GitHub builds GitHub using the full range of capabilities: from GitHub Copilot, to Projects, to CodeQL. You will also learn how we roll out new tech to GitHub's development teams so everyone can take advantage of the powerful new productivity tools.

Speakers: Neha Batra, Martin Woodward

Location: Level 0, Exhibit Hall 1

#### **Resources:**

<u>GitHub Copilot - Your AI pair programmer</u>

So, what is GitHub?

GitHub Features - check out all the GitHub features in one place

#### **GitHub Certifications**

<u>Collection: Accelerate Developer Productivity with GitHub and Azure for</u> <u>Developers</u>

#### Thursday, May 23 at 9:45 AM Australian Eastern Standard Time

#### Serverless architectures: Effortless Intelligent Apps at extreme scale

Dive into the forefront of AI-led app development, from RAG solutions to chatbots with serverless architectures. Explore how to bring your own data to quickly build and deploy modern, intelligent apps with Azure Container Apps and Azure Functions. Leverage new capabilities like Flex Consumption Plan, extension for Azure OpenAI, secure sandboxes for LLM code processing, vector DBs and more. Discover architecting event driven modern apps at extreme scale with Serverless on Azure.

Location: Level 4, Room 425

Thursday, May 23 at 11:00 AM Australian Eastern Standard Time

# Level up your dev box, how devs at Microsoft are productive on Windows

Developers across Microsoft have learned different ways to be more productive in our daily work, and will also see the set ups and tools from your favorite social developers, maybe we all learn a few tricks from each other. From using aliases, amazing VS Code extensions, customizing Windows Terminal in a variety of ways, speed runs to setting up new computers, and more! Learn how to optimize your time to be more productive with shortcuts, apps, and systems you may not have been aware of.

**Speakers:** Scott Hanselman, Scott Hanselman, Vicky Harp, Maddy Montaquila, Scott Hanselman

Location: Level 2, Flex Hall C2

#### Thursday, May 23 at 11:00 AM Australian Eastern Standard Time

## What's new in GitHub Copilot and Visual Studio

GitHub Copilot is your AI coding assistant, and when paired with Visual Studio, so much more! We'll take you through tips and tricks, special integrations, and other recent enhancements to make sure you're getting the most out of GitHub Copilot, including things that you can only do with Visual Studio.

Speakers: Damian Brady, Filisha Shah

Location: Level 0, Exhibit Hall 1

#### **Resources:**

GitHub Copilot - Your AI pair programmer

What is GitHub Copilot?

**GitHub** Certifications

Collection: Accelerate Developer Productivity with GitHub and Azure for Developers

Friday, May 24 at 1:30 AM Australian Eastern Standard Time

#### What's new in C# 13

Join Mads and Dustin as they show off a long list of features and improvements coming in C# 13. This year brings long-awaited new features like extensions and field access in auto-properties, as well as a revamped approach to breaking changes to ensure cleaner language evolution in years to come. Additionally, we take collection expressions to the next level by facilitating dictionary creation and opening params to new collection types.

**Speakers:** Dustin Campbell, Mads Torgersen

Friday, May 24 at 2:45 AM Australian Eastern Standard Time

# Deploy, test and run apps with Azure Deployment Environments

Learn how to enable developers to swiftly create and manage app infrastructure with Azure Deployment Environments, customizing workflows to specific organizational needs and maintaining consistency, best practices, and robust security. Also, learn how Azure DevTest Labs enables your development teams to create and manage test VMs for deploying and testing desktop apps, all within the organizational guardrails.

Speakers: Erica Guthan, Sagar Lankala

Location: Level 0, Exhibit Hall 2A

Friday, May 24 at 2:45 AM Australian Eastern Standard Time

# Windows Subsystem for Linux, Your enterprise ready multitool

Join the development team of WSL to get a deep dive into the architecture behind the product, and how you can use this versatile tool for everything from cloud development in your Enterprise to fine tuning your very own large language model!

Speakers: Pierre Boulay, Craig Loewen

Location: Level 4, Room 420

Friday, May 24 at 5:30 AM Australian Eastern Standard Time

"Highly Technical Talk" with Hanselman and Toub

Join Scott Hanselman and partner software engineer Stephen Toub for a talk is that 100% LIVE demo. Zero slides, just code. In this "highly technical talk" on the internals of. NET, they'll look for performance issues and fix them live on stage. In this talk you'll learn debugging, performance, and optimization skills. You'll see how engineers at Microsoft use their own tools to find issues and fix them. If you are super advanced, level up, and let's see how deep you can go!

Speakers: Scott Hanselman, Scott Hanselman, Scott Hanselman, Stephen Toub

Location: Level 2, Flex Hall C2

Friday, May 24 at 6:45 AM Australian Eastern Standard Time

# **Extending GitHub Copilot**

GitHub Copilot is the worlds most popular AI developer tool, bringing new levels of productivity to teams and opening up to allow developers to build agents and skills to further extend the AI assistance. Are you looking to make it easier for developers to stay in the flow and use your service as part of their developer experience or get advice on using key parts of your own internal engineering systems? In this session we get a sneak peak into the internals of extending GitHub Copilot.

Speakers: Jason Etcovitch, April Leonard

Location: Level 2, Flex Hall C2

#### **Resources:**

GitHub Copilot - Your AI pair programmer

What is GitHub Copilot?

GitHub Copilot video series

**GitHub** Certifications

Collection: Accelerate Developer Productivity with GitHub and Azure for Developers

#### Friday, May 24 at 6:45 AM Australian Eastern Standard Time

#### Leverage Azure Testing Services to build high quality applications

Join us to explore how Azure Testing Services integrate in CI/CD workflows to deliver high-quality applications. Learn how to speed up build pipelines and improve test coverage with Microsoft Playwright Testing's cloud-based web app testing and reporting insights. Find out how to use Azure Load Testing to easily generate high-scale load and identify performance bottlenecks with actionable insights.

Speakers: Vansh Singh, Nagarjuna Vipparthi

Location: Level 0, Exhibit Hall 2B

**Resources:** 

Azure Load Testing

Playywright Testing

Playwright Testing Preview Documentation

Apps on Azure Blog

# **Azure Boards New and Noteworthy**

In this demo packed session, learn all about the latest features in Azure Boards and how to use it alongside your entire DevOps pipeline including tools like GitHub Enterprise.

Speakers: Dan Hellem