Microsoft Build 2024 Recap

Virtual Boston Azure
June 3, 2024

Bill Wilder, Veronika Kolesnikova and Jason Haley

Jason’s Favorites

Five lessons Etsy learned building on Microsoft AI

https://build.microsoft.com/en-US/sessions/ae85ca15-f1e5-4196-b397-48c1678800bb?source=/favorites

Lessons:

1. Use the right platform for the job
2. Learn by building it
3. Always optimize for impact
4. Constraints Matter
5. It’s a journey, not a destination

From the Book of News:

Browse Credentials | Microsoft Learn

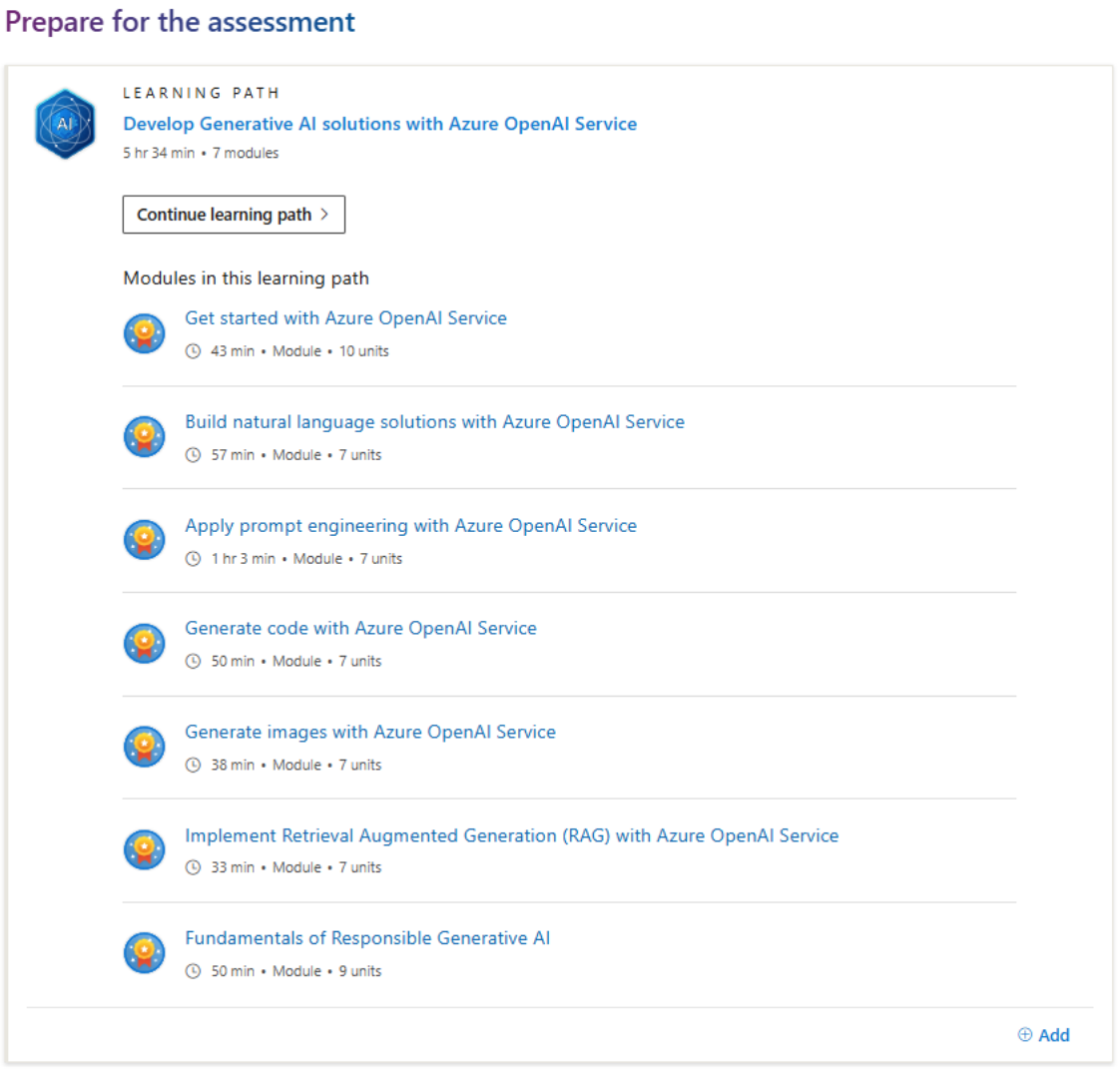
New Applied Skills credentials that support developers who build AI and cloud solutions include:

- Accelerated app development using GitHub Copilot.
- Developing AI agents using Microsoft Azure OpenAI Service and Semantic Kernel.
- Automated Microsoft Azure Load Testing using GitHub.

The current portfolio of Microsoft credentials, which has more than 20 Microsoft Applied Skills and 50 Microsoft Certifications in solution areas like Data and AI, Infrastructure, Digital and App innovation, Business apps, Modern Work and Security, is now enhanced by these new credentials. Certifications offer the flexibility to grow the skills needed for critical roles and Applied Skills offer the ability to expand the skills needed for key business scenarios. Together they bring verifiable skill sets aligned to AI and cloud job roles and projects. Explore all AI Microsoft Credentials.

Learning Path: Develop generative AI solutions with Azure OpenAI Service

- https://learn.microsoft.com/en-us/credentials/applied-skills/develop-generative-ai-solutions-with-azure-openai-service/

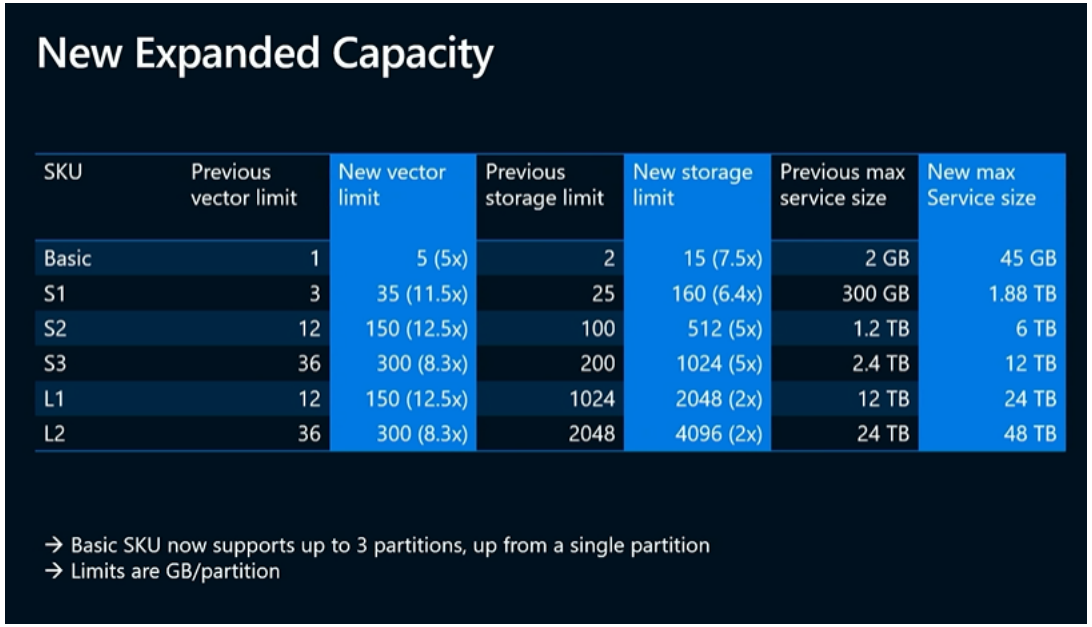


RAG at scale: production-ready GenAI apps with Azure AI Search

https://build.microsoft.com/en-US/sessions/ff81130c-db16-4120-bc08-2061f911e6e1?source=/favorites

Mostly about Azure AI Search enhancements

- New Expanded Capacity
- Quantization
- Binary Quantization
- AI Studio Model Catalog for Embeddings



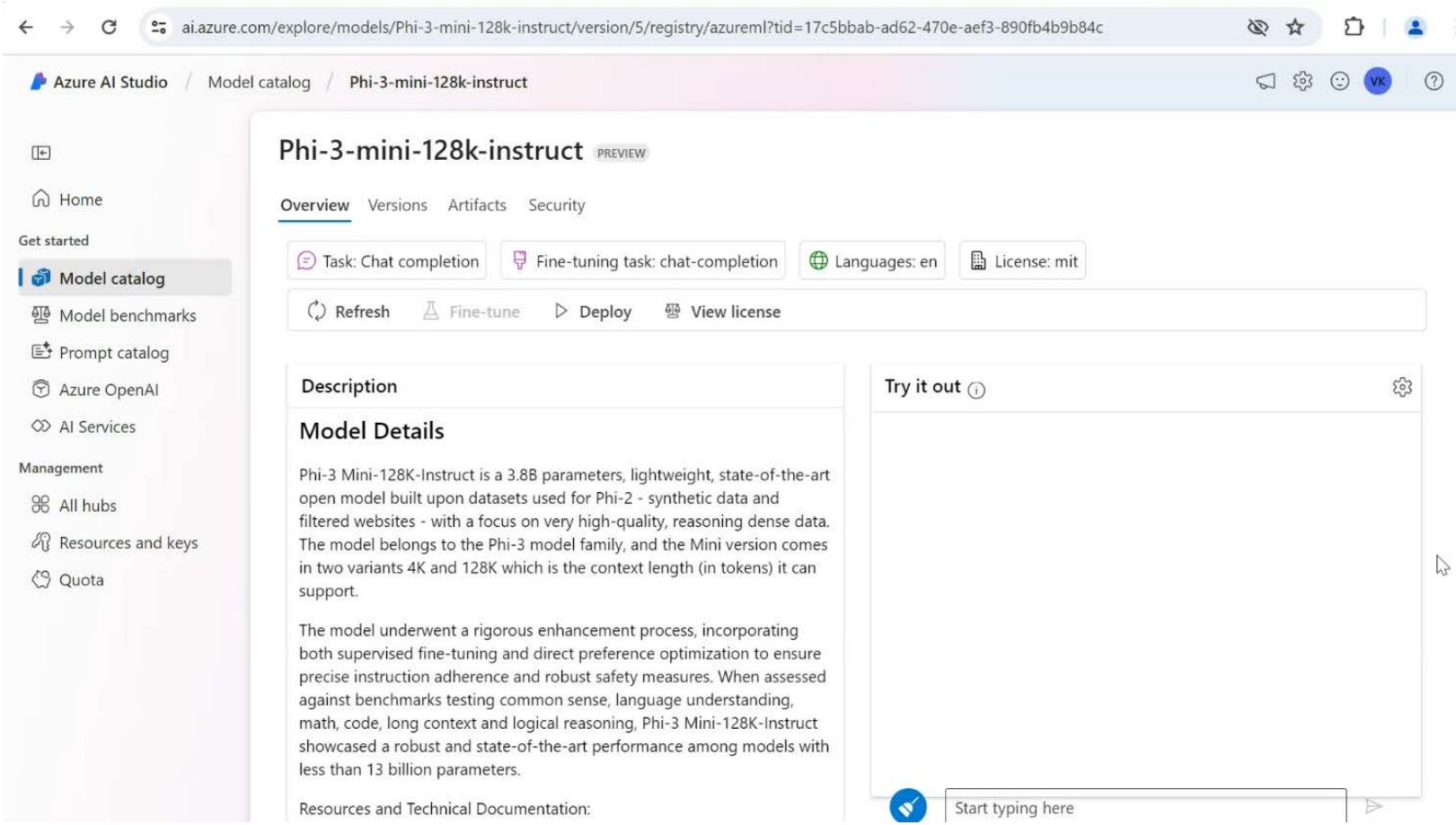
Take an Azure OpenAI chat application from PoC to enterprise-ready

https://build.microsoft.com/en-US/sessions/9babe697-a4be-4a86-9995-f34c08e1d06e?source=sessions

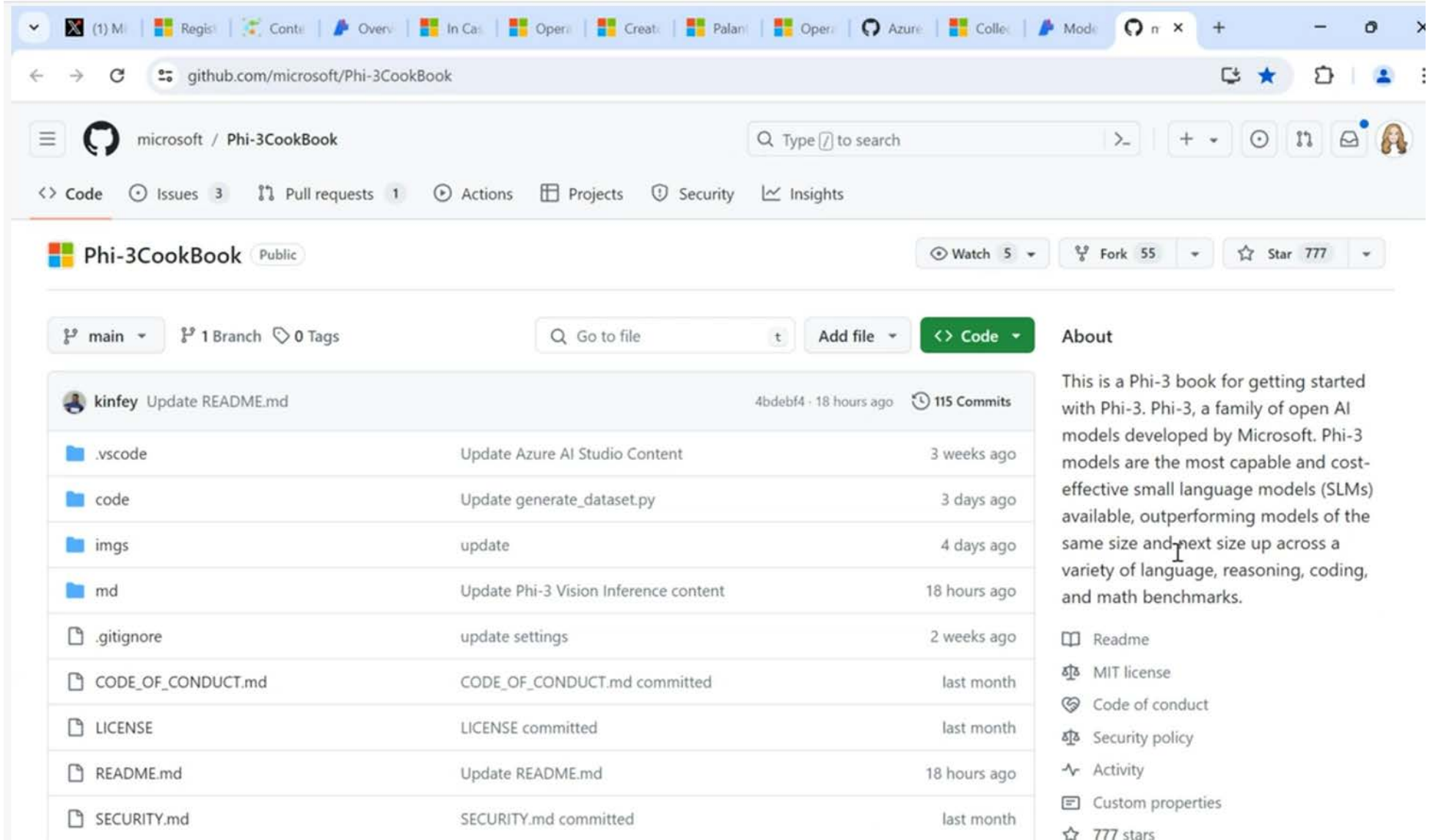
- Resources:
  - https://github.com/microsoft/rag-experiment-accelerator
  - https://learn.microsoft.com/en-us/azure/architecture/ai-ml/guide/rag/rag-solution-design-and-evaluation-guide

Veronika’s Favorites

Phi-3 and Small Language Models



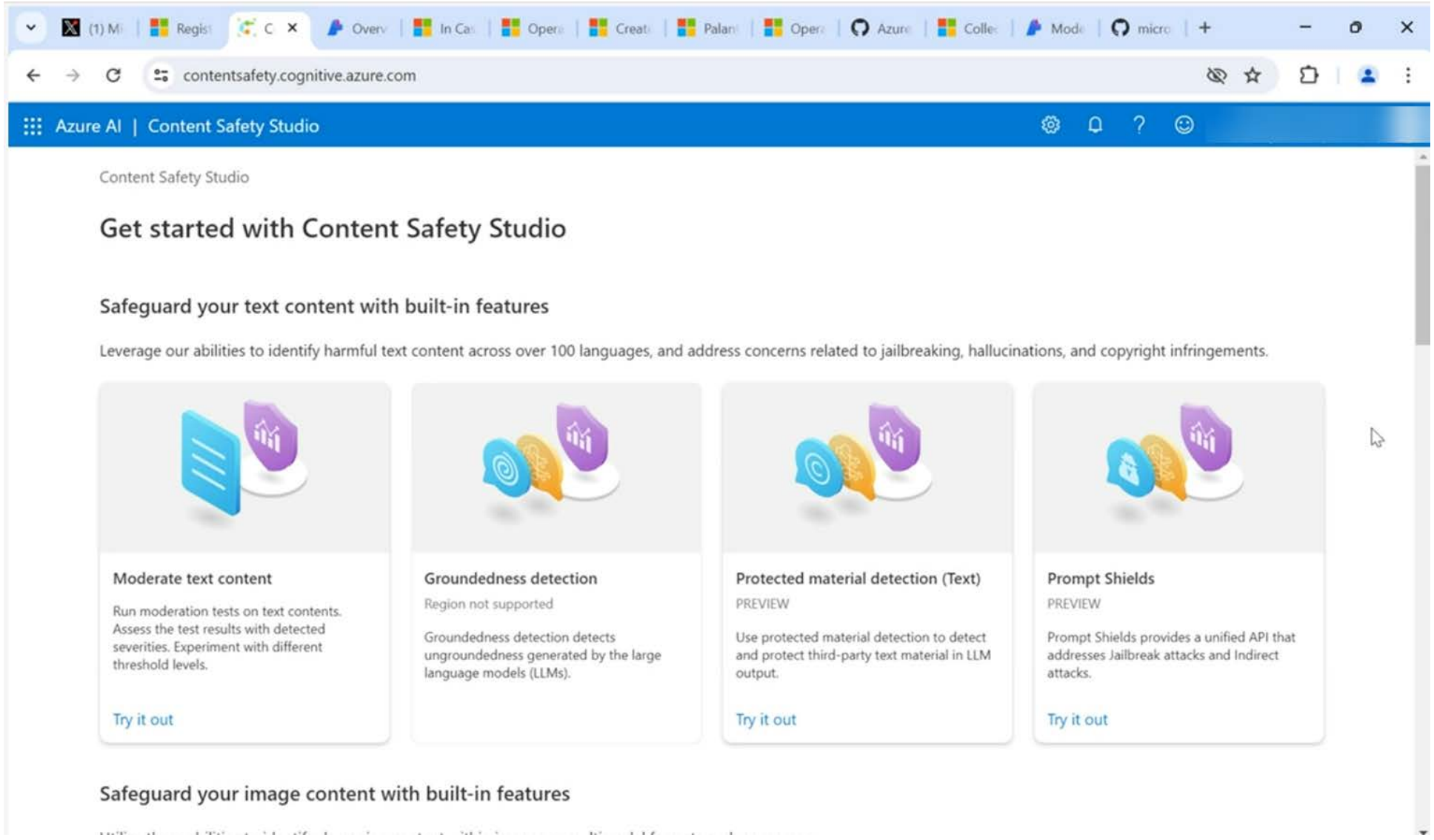
Phi-3 Cookbook



Phi-3 Session

- Create Generative AI experiences using Phi
  - https://build.microsoft.com/en-US/sessions/e6d21a49-2efb-4a39-8c26-f6eef1410c7a?source=sessions

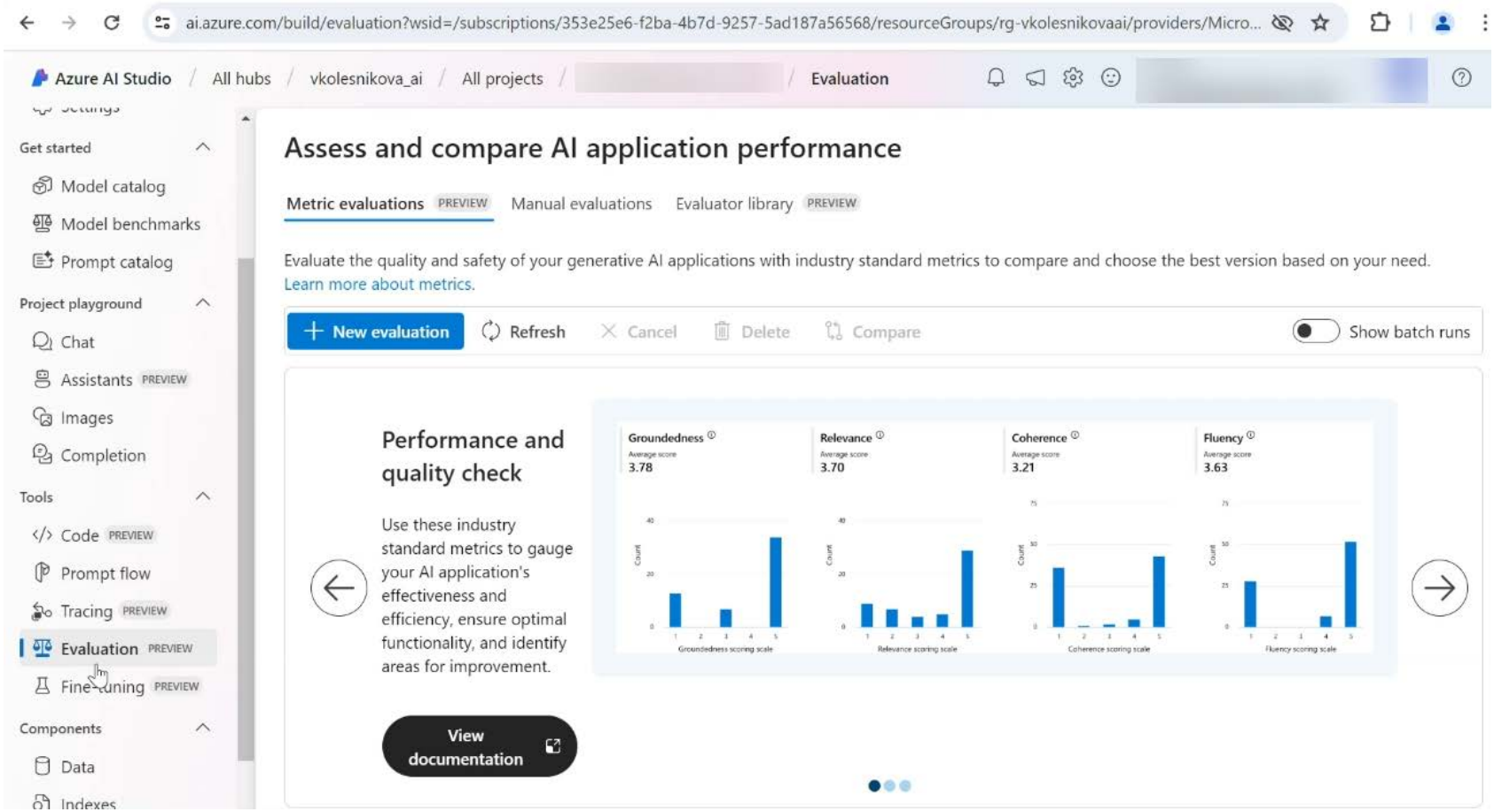
Responsible AI and Content Safety



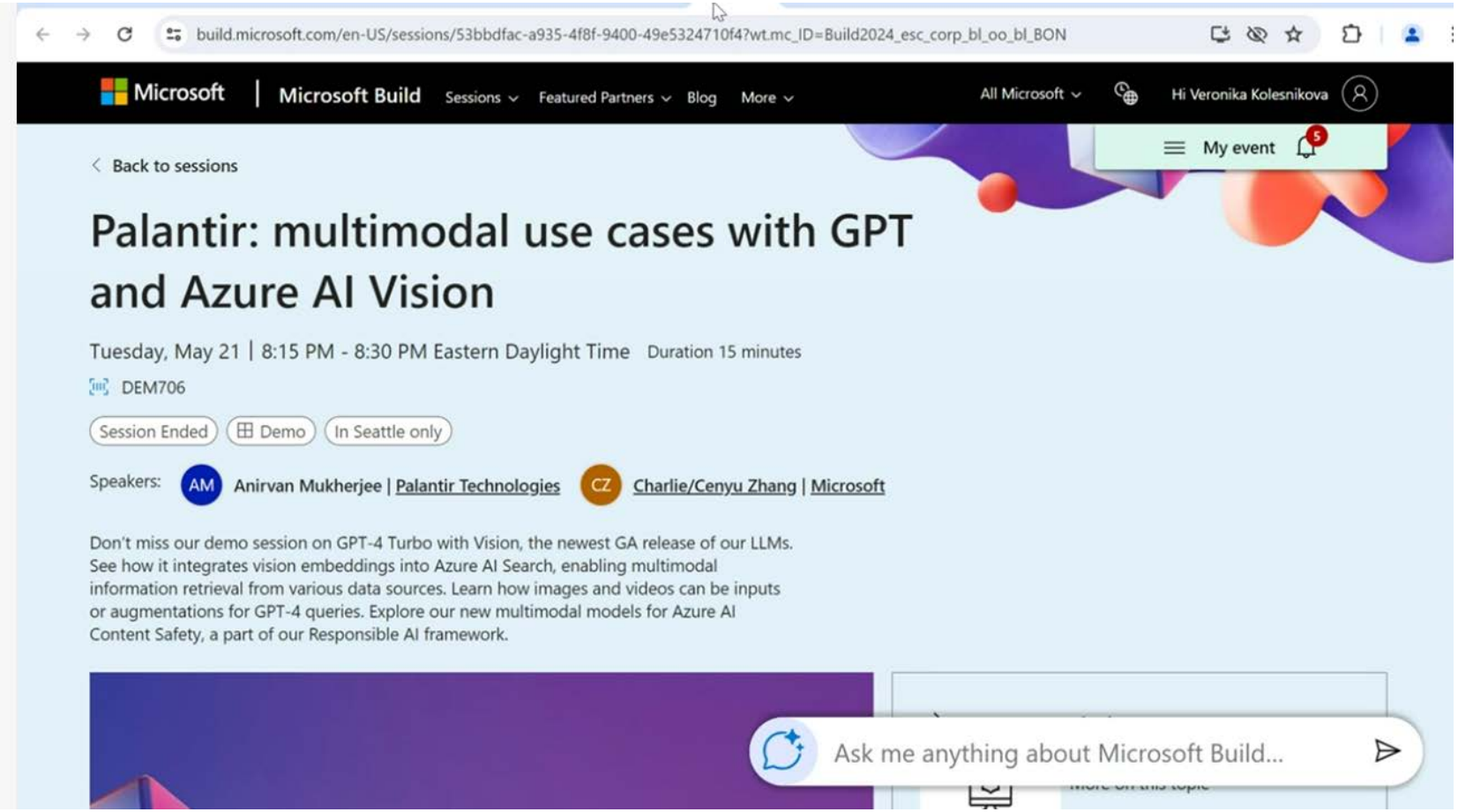
Responsible AI and Content Safety (contd)

- Sessions by Sara Bird
  - Operationalize AI responsibly with Azure AI Studio
    - https://build.microsoft.com/en-US/sessions/de3dfc8d-3aaf-4dc2-97c3-5b2937961d54
  - Next generation AI for developers with the Microsoft Cloud
    - https://build.microsoft.com/en-US/sessions/226c764e-ab30-4ec3-b8ce-53eb230dcfe0

Evaluations



Multimodal use cases



Bill’s Favorites

Available at: https://blog.codingoutloud.com/

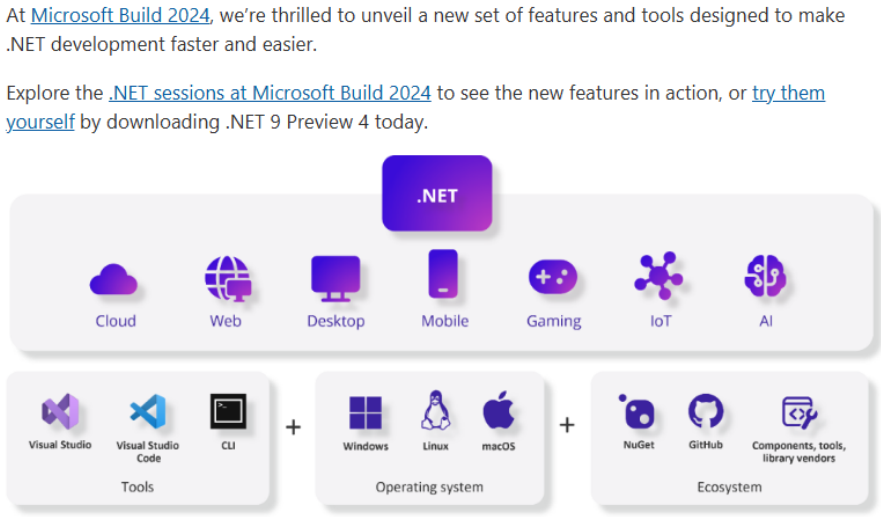
Some More Resources

Book of News

https://news.microsoft.com/build-2024-book-of-news/

Blog: .NET Announcements and Updates from Microsoft Build 2024

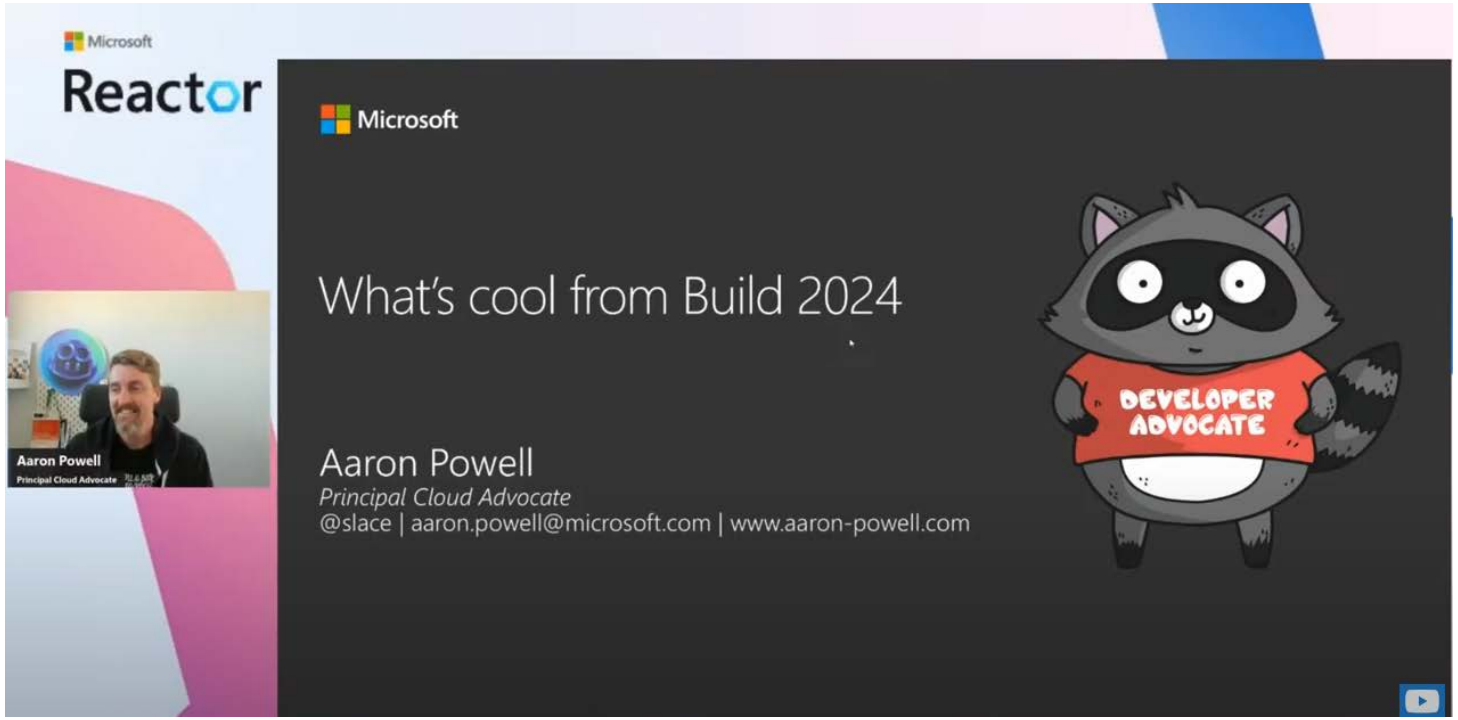
- https://devblogs.microsoft.com/dotnet/dotnet-build-2024-announcements/



Youtube: Advancing AI - Microsoft Build 2024 AI Highlights

- https://www.youtube.com/watch?v=UdkbjbC6ars

Recap: Microsoft Build 2024 (by Aaron Powell)



- https://www.youtube.com/watch?v=iVeE4oo4I6I

Notes on next page ->

- Copilot + PCs (ARM based computers) - actually announced the day before MSBuild
- Developer deep dive on building plugins for Microsoft Copilot (Bob German & David Rousset)
  - Session: https://build.microsoft.com/en-US/sessions/8822feb4-ebb8-4427-9e93-67011e4d0620?source=sessions
  - VS Code Extensions for helping build copilots
- Teams copilot (mentioned in several sessions)
- AI Services - lots of announcements
  - GPT 4o now GA in Azure
  - Phi-3 SLMs
  - AI Search improvements
  - Azure AI Studio no GA
- Create Generative AI experiences using Phi (Sam Kemp, Yufeng Li)
  - Session: https://build.microsoft.com/en-US/sessions/e6d21a49-2efb-4a39-8c26-f6eef1410c7a?source=sessions
  - AI Toolkit VSCode extension (pre-release version), kind of like a local AI Studio
  - Onyx and Olive
- Announcing EAP for Vector Support in Azure SQL Database
  - Blog post: https://devblogs.microsoft.com/azure-sql/announcing-eap-native-vector-support-in-azure-sql-database/
- Azure OpenAI extension for Azure Functions
  - Blog post: https://learn.microsoft.com/en-us/azure/azure-functions/functions-bindings-openai
  - Triggers and Bindings for working with OpenAI
- Session: .NET Aspire development on any OS with the Visual Studio family
- Session: What's new in GitHub Copilot and Visual Studio

Azure AI @ MS Build 2024

- https://github.com/azure/azure-ai-at-build

Azure AI Session & Resources

Day 1

Time	Session	Resources
9AM	Microsoft Build opening keynote	
11:30AM	AI Everywhere – Accelerate your development from the edge to cloud	
11:30AM	Azure AI Studio - Creating and scaling your custom copilots	Learn Collection: Create custom copilots with Studio
11:30AM	Developer's Guide to Customizing Microsoft Copilot	Learn Collection: Enhance productivity with M Copilot
11:30AM	Building Plugins for Copilot for Microsoft 365	Learn Collection: Explore the possibilities witl Microsoft Copilot for Microsoft 365
11:45AM	Employ AI on Snapdragon X Elite for code generation and image creation	
11:45AM	Build Generative AI voice bots with line of business data	Learn Collection: Create custom copilots with Studio
1PM	Learn how to interact with Large Language Models	Learn Collection: Learn how to interact with L Language Models
1PM	Unlock potential on Azure with Microsoft Copilot	Learn Collection: The adaptive cloud approac Azure
1PM	What's new with Microsoft Copilot Studio	Learn Collection: Build your own copilot with Copilot Studio

Blog: In Case You Missed It: Top Announcements and On-demand Sessions from Microsoft Build 2024

- https://startups.microsoft.com/blog/in-case-you-missed-it-top-announcements-and-on-demand-sessions-from-microsoft-build-2024/

Microsoft Build, our flagship developer conference, wrapped up last Thursday. From the opening keynote from Satya Nadella to over 55 product announcements, our team has gone through them all and curated the top announcements and on-demand sessions for startup founders.

GPT-4o generally available: Use your Azure credits to build and deploy multimodal apps on this groundbreaking model that integrates text, image, and audio processing all within Azure OpenAI Service. Visit the breakout session here to learn more.

Phi-3 model family generally available: Conserve runway and still build lifechanging AI experiences with Microsoft's small language models (SLMs). These more accessible models can be easily fine-tuned to fit your startup's needs while using limited compute. To find out more, watch the breakout session here.

Azure AI Studio generally available: Get access to more than 1,600 models to explore, build, and deploy you AI solutions on a platform that empowers responsible generative AI development. Watch this breakout sessior to learn more.

Build with AI tab in Founders Hub: Don't know where to start? Save time and resources in the new Build wit AI tab, where you'll find links to explore all these offerings and a curated set of flexible templates that make creating and using AI solutions faster and easier. View this breakout session to find out more.

New guidance for developing chatbots generally available: Design and deploy applications with the latest Azure reference architectures, service guides, and patterns to create a private chatbot. The latest guides make it easier for you to build a cost-efficient and compliant AI assistant. View the breakout session with Rob Bagby and Ritesh Modi here to learn more.