



Build your own AI-Powered Web App

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You need a
GitHub account!

Got to
GitHub.com
and create an
account if you
don't have one.



Workshop Outcomes:

Use GPT APIs and add data using RAG.

Turn it into a Python web app with Flask!

Learn about opportunities for students!

Agenda:



1. GitHub Set-up
2. Why learn AI?
3. Today's tools and AI/Cloud concepts
4. Azure Set-up Demo
5. Build an Python chatbot with GPT.
6. Add custom data to your chatbot
7. Learn about student opportunities with Microsoft!
8. Turn your Python bot into a web app
9. Azure deployment demo

Let's learn about you!

Join us on menti.com
Code: 7341 1190



Why Learn AI?





2024 Work Trend Index

From Microsoft and LinkedIn

Elizabeth Pappalardo,
Community Program Manager, Microsoft

Work Trend Index 2024

<http://aka.ms/wti24>



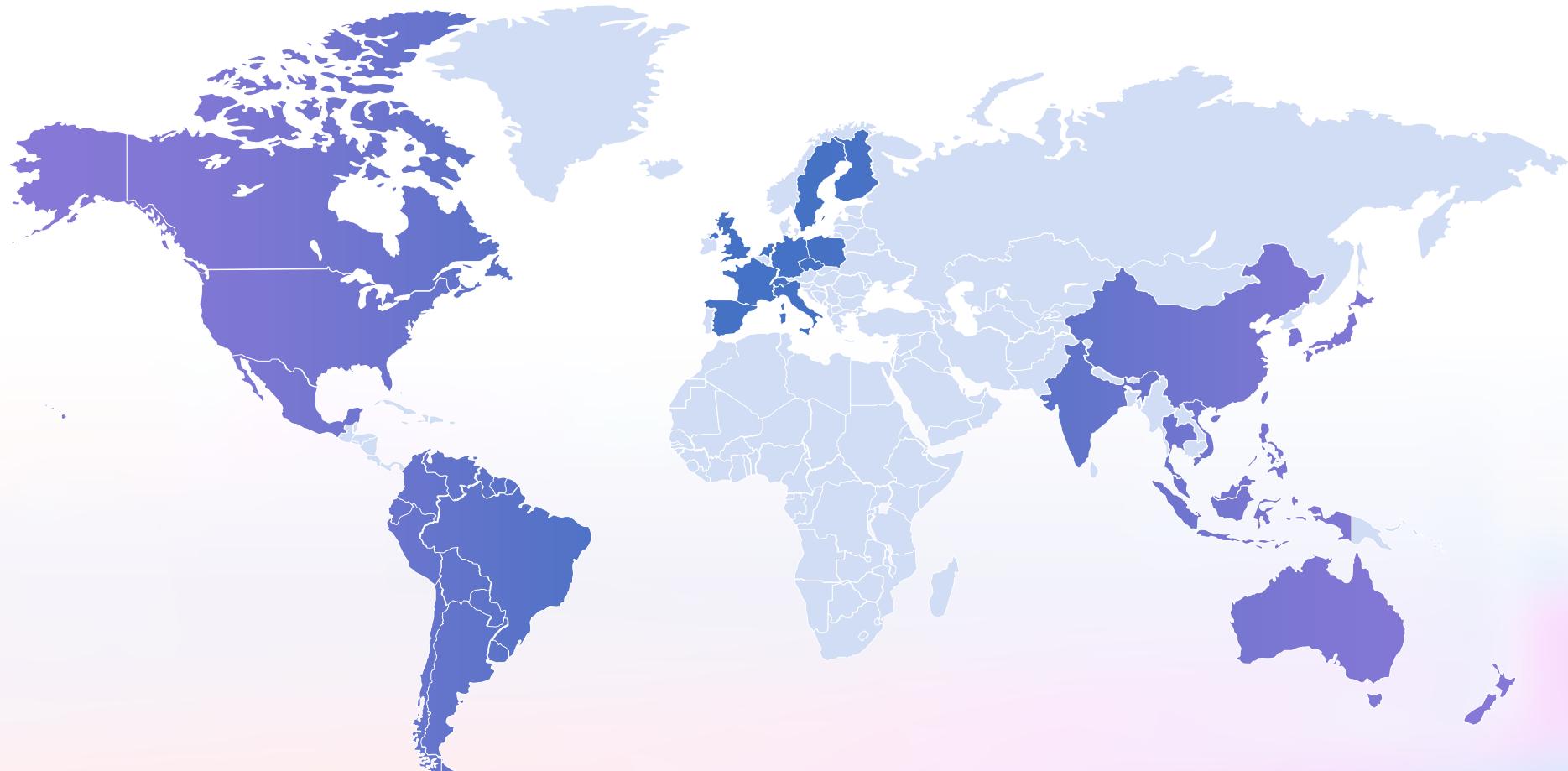
31,000 people across
31 countries



Labor, hiring trends
from **LinkedIn**



Productivity patterns
of **Microsoft 365**



Three findings stood out

1

Employees want AI at work—and won't wait for companies to catch up.

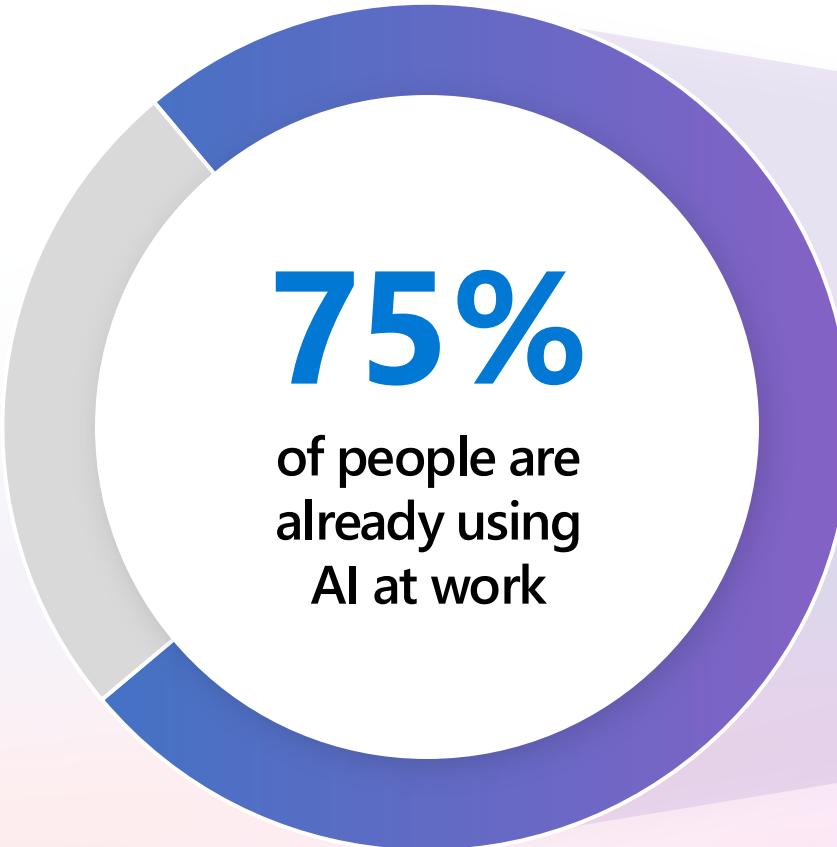
2

The rise of the AI power user—and what they reveal about the future.

3

For employees, AI raises the bar and breaks the career ceiling.

AI has come
to work

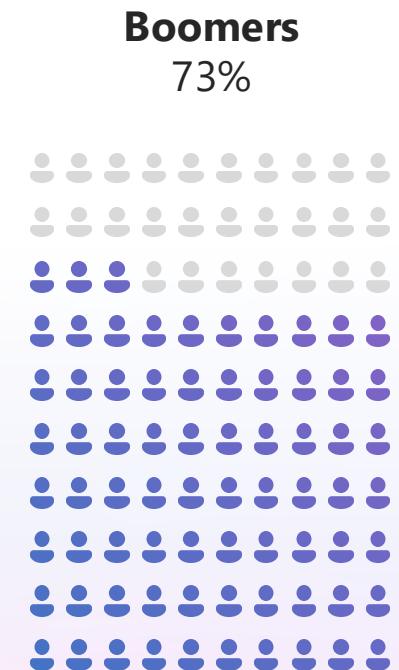
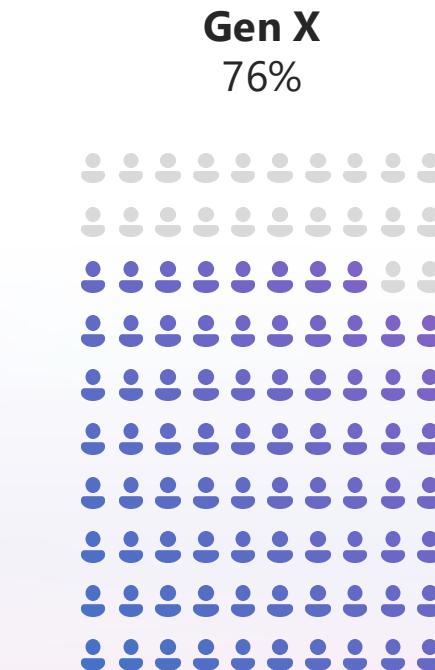
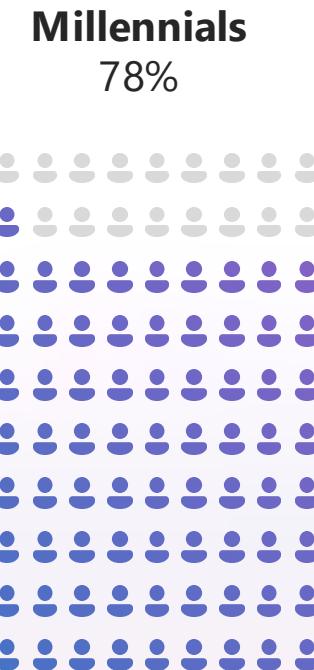
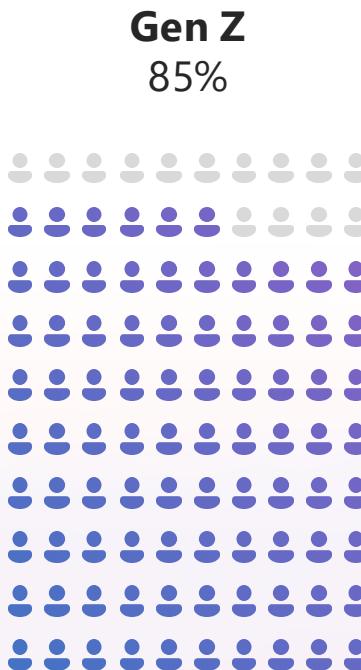


78%

of employees are bringing their
own AI tools to work

BYOAI Is Not Just for Gen Z

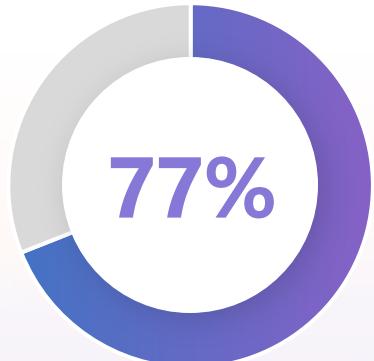
Employees across every age group are bringing their own AI tools to work



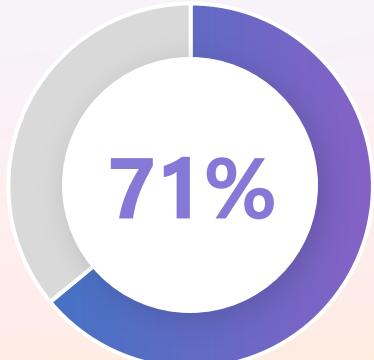
Share of survey respondents who have used AI tools at work not provided by their organization

The New Hiring Imperative

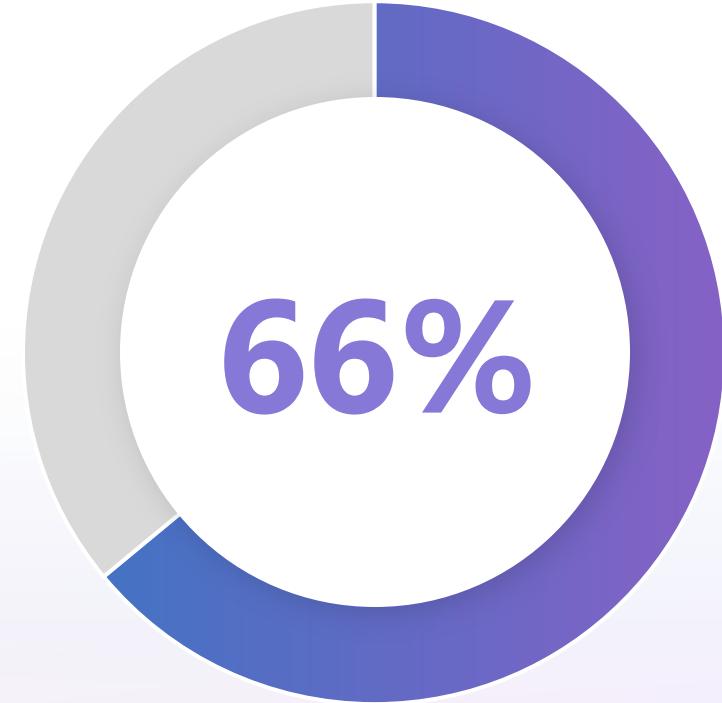
AI aptitude takes center stage



Leaders say early-in-career talent will get greater responsibilities due to AI



Leaders are more likely to hire a less experienced candidate with AI skills than a more experienced one without them



Leaders would not hire someone *without* AI skills

AI, your competitive edge.

The opportunity to grow your
career is now.

What is AI?

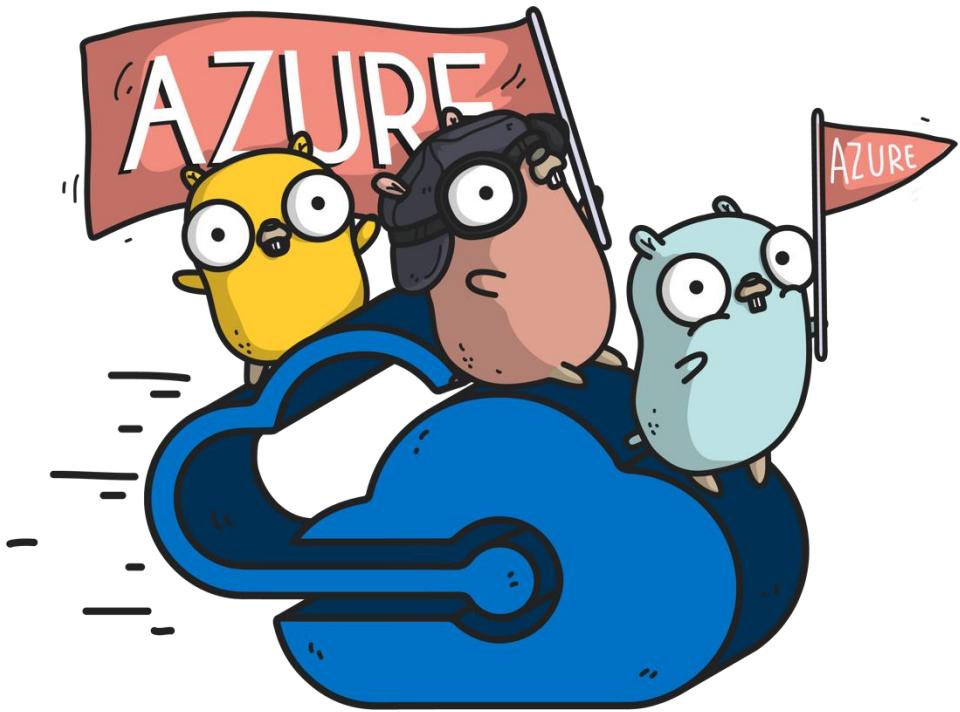


GPT isn't a brand it's an idea!

Generative Pre-Trained Transformer

There are lots of types of GPT models on Azure!

AI On Azure!



What AI and GPT
Resources are on
Azure?

How does it get set up?

What is an API?

How to Access Azure AI

Do it at home!

Azure for Students

Get Azure AI Access

GitHub Student Developer Pack

**Today we'll be using
a proxy to avoid
signing up!**

*But you can also use the real Azure
product at home (with a free quota
for students).*

Let's get building!

GitHub Repo:

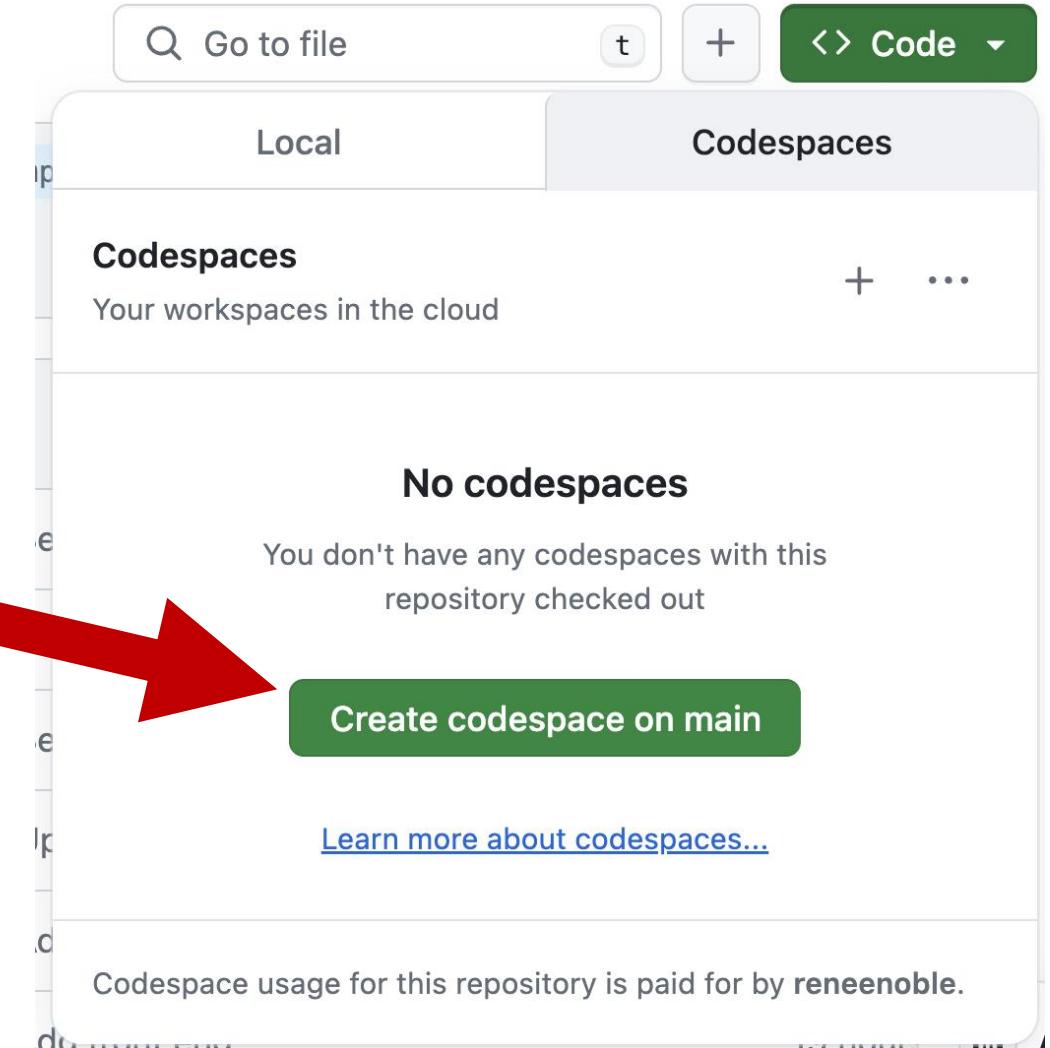
[aka.ms/ai-rag-app-repo](https://github.com/aka.ms/ai-rag-app-repo)



Click Use this template ▾ and create a new
repository to get your own copy

Let's get building!

Create a Codespace!

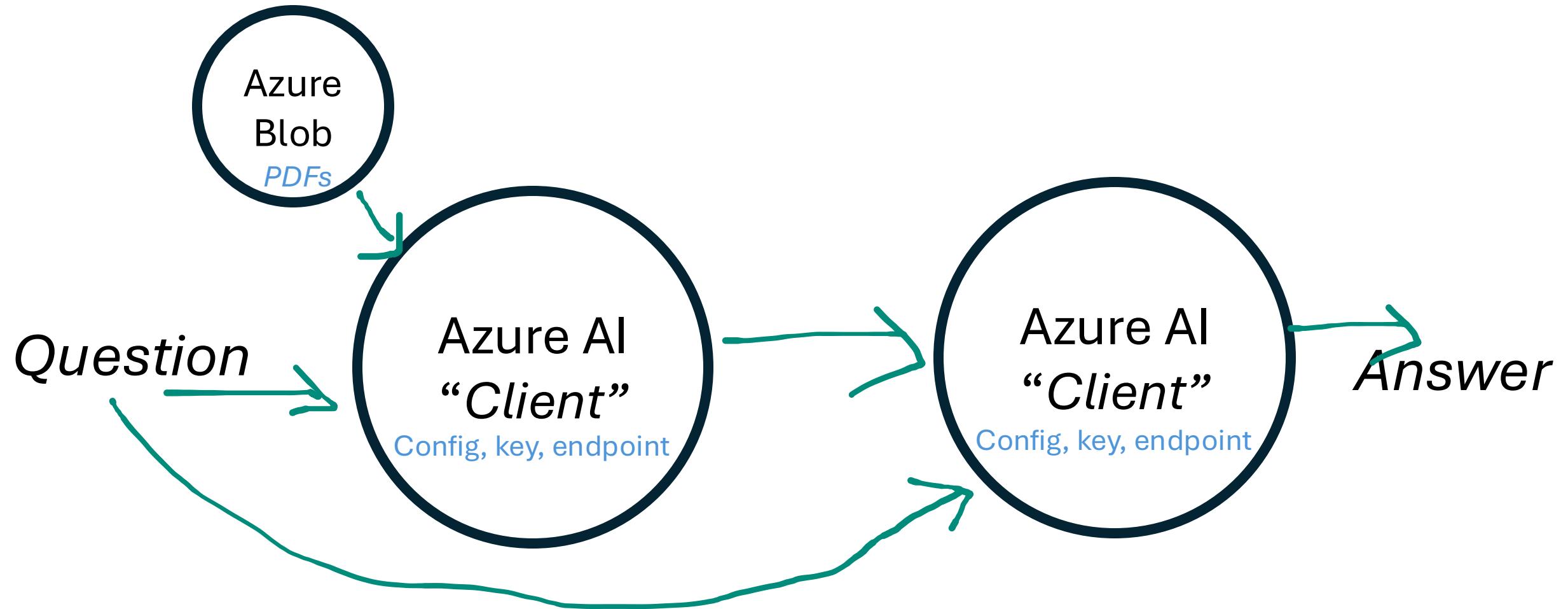




Workshop Part 1 - Adding AI



Workshop Part 2 – Add your own data



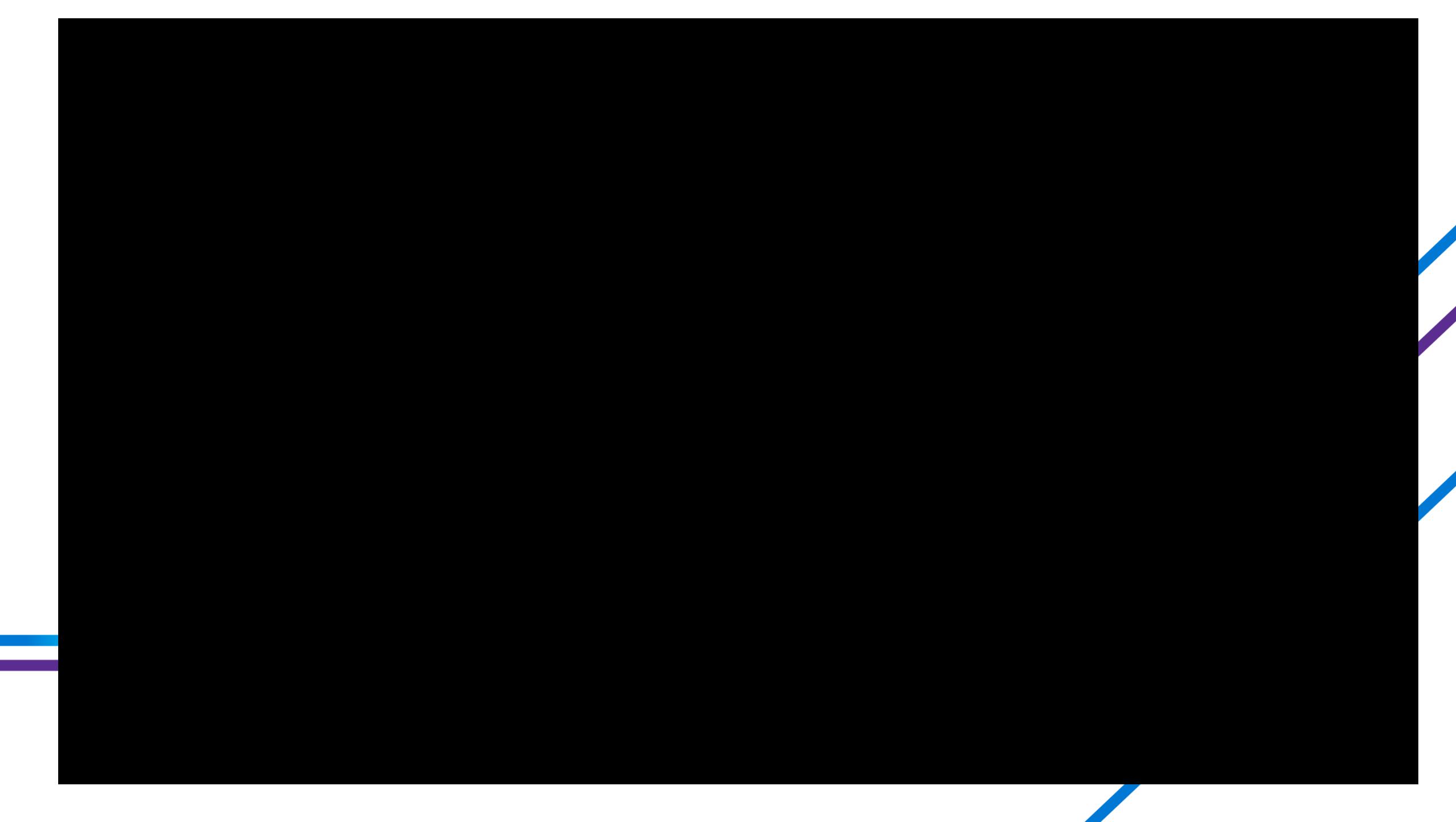
Join our Microsoft Student Community





Microsoft Learn Student Ambassadors





Why Join the community?

Whether you're passionate about tech, AI, or entrepreneurship, our inclusive community will empower you to **unlock your potential, build valuable connections, explore cutting-edge technology, and boost your personal growth** through empowering leadership opportunities and online influence.



Grow as an AI entrepreneur or technical leader

Unlock your potential. Gain exclusive access to cutting-edge Microsoft technologies, including Azure, Microsoft 365 with Copilot, and Visual Studio Enterprise, empowering you to build, innovate, and create the future.

Join a global community

Connect and collaborate. Become part of a vibrant and diverse global community of tech enthusiasts, AI innovators, and aspiring entrepreneurs. Create valuable connections, share ideas, and find community within a network of peers.

Leadership opportunities that will help you make an impact

Customize your journey. Develop leadership skills that align with your interests and aspirations. Empower yourself to leave a lasting impact on the tech community, while also boosting your resume, personal growth, and online influence.

Student Ambassadors benefits

Student Ambassadors complete activities that **make contributions to the community** and work to **unlock additional benefits**.

Key Benefits



Access to Microsoft 365

Visual Studio Enterprise subscription

\$150 monthly Azure credits

Incentives for hosting events

Student Ambassadors Swag

Ready-to-go presentation materials

Engagement with Microsoft employees, Microsoft MVPs, and other students worldwide

Student Ambassadors milestone badges to highlight program accomplishments on LinkedIn profiles

Who are the Student Ambassadors

(Based on average historical data)

4K Student Ambassadors

108 Countries

1.7K Universities



Education Breakdown

Working toward a Bachelor of Arts



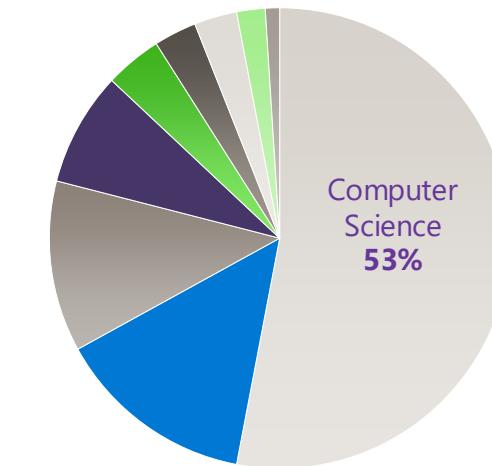
Working toward a Master's degree



Working toward a PhD



Focus Area



- Software Engineering 14%
- Engineering – Other 12%
- Other 8%
- Electrical Engineering 4%
- Information Systems 3%
- Systems Engineering 3%
- Business 2%
- Cybersecurity 1%

Meet Gold Ambassadors



Humprey Muriungi
Kenya
Gold Milestone

"Joining the community was the best thing that happened to me in my career. It has been an amazing experience which has inspired me to become a force for good and inspire others to achieve more."



Nawrin Tabassum
Bangladesh
Gold Milestone

"Being a Student Ambassador gives you the feeling of belonging. It not only helped me learn new skill, but also gain confidence. It allowed me to connect with a diverse group"



Shariff Nasser
Mexico
Gold Milestone

"The truth is, you don't have to be an expert. What's important is something we all share: a passion for technology and a passion for our community."

What to expect

Share your passion and unlock leadership opportunities by **creating AI-driven solutions, skilling on cutting-edge AI technology, and building community.**

Discover opportunities to become the leader you aspire to be through activities such as:

- **Building AI-driven solutions**
- **Skilling on cutting-edge AI technology**
- **Sharing your passion and empowering your peers**
- **Collaborating with Microsoft employees**
- **Representing Microsoft Student Ambassadors at events**



Your advancement is fueled by completing activities, contributing to the community, and building technical solutions as you unlock additional benefits.

Apply today!

StudentAmbassadors.com



MVP Communities

[Student Ambassadors](#)

Most Valuable Professionals

Regional Directors

Nominate

Search

[Student Ambassadors](#)

Get Started

Events

Imagine Cup

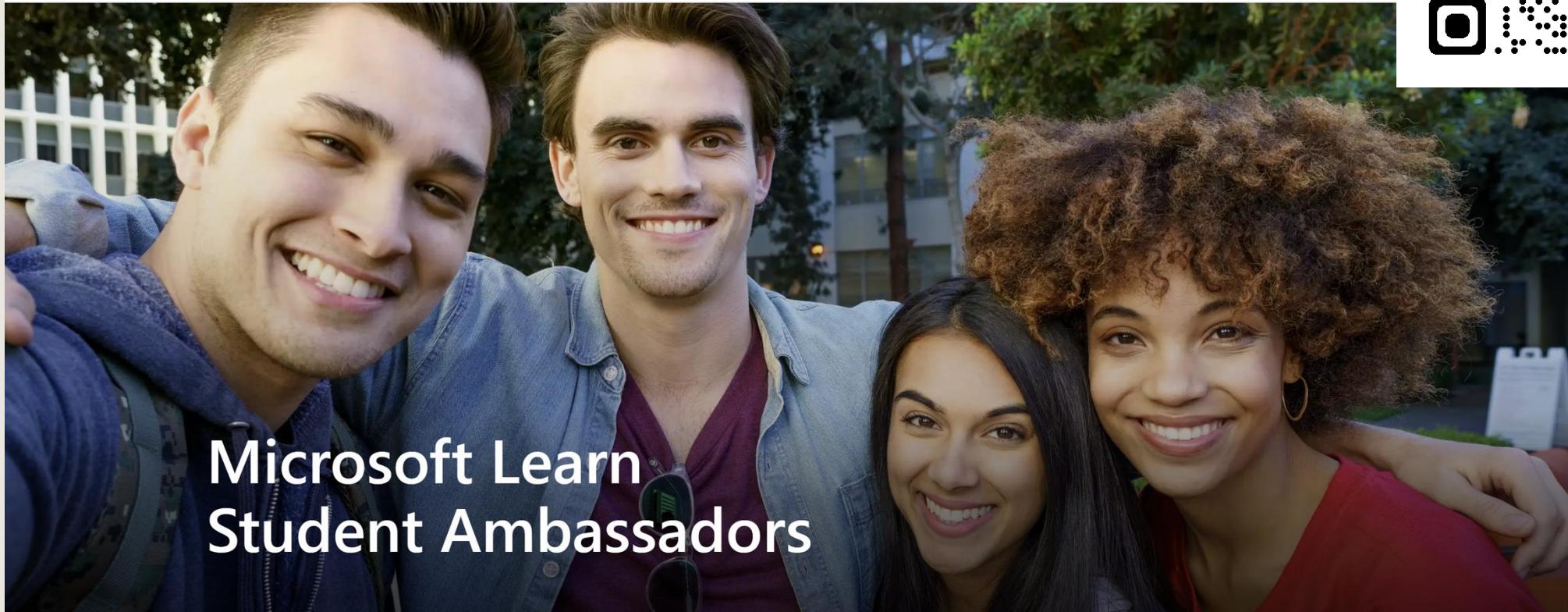
Questions

Find a Student Ambassador

Learn Student Hub

Resources

Nominate

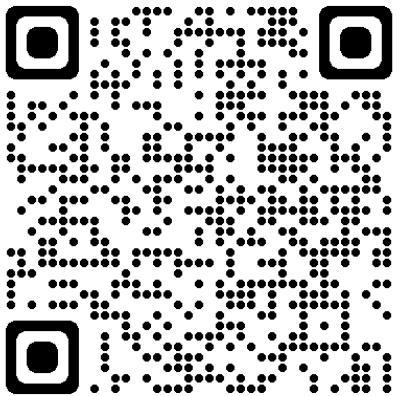


Microsoft Learn Student Ambassadors

[Become a Student Ambassador](#)

Join our global community of students who are passionate about building AI-driven solutions with Microsoft technology. Accelerate innovation and grow the skills you need to have greater impact in the projects and communities that matter to you.

[Get Started >](#)



Microsoft Learn Student Ambassador Information Sessions

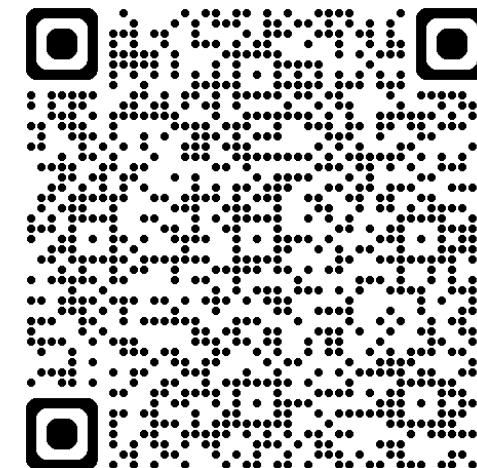
With Community Manager, Elizabeth Pappalardo

30 July, 4PM – 5PM

Register at <https://aka.ms/MLSA-Information-Session>
or scan the QR code.

We discuss:

- Program opportunities
- Benefits for your professional development





Student Bootcamps



Join the 2024 Winter School Data & AI Bootcamp!



Benefits of joining the Winter School Bootcamp

- Industry-recognised Microsoft certification
- Interactive Data & AI demos - Computer Vision, GenAI, Data Visualisation and more!
- Meet Industry Experts
- Career Development sessions
- Access to the Microsoft Bootcamp Talent Community on LinkedIn
- Fully online/virtual



"Overall it was an amazing bootcamp, the live sessions were really well set up, it was easy to navigate the learning modules and ALL of the hosts/speakers were absolutely brilliant!"

Annie

Bootcamp Participant, Summer School 2024



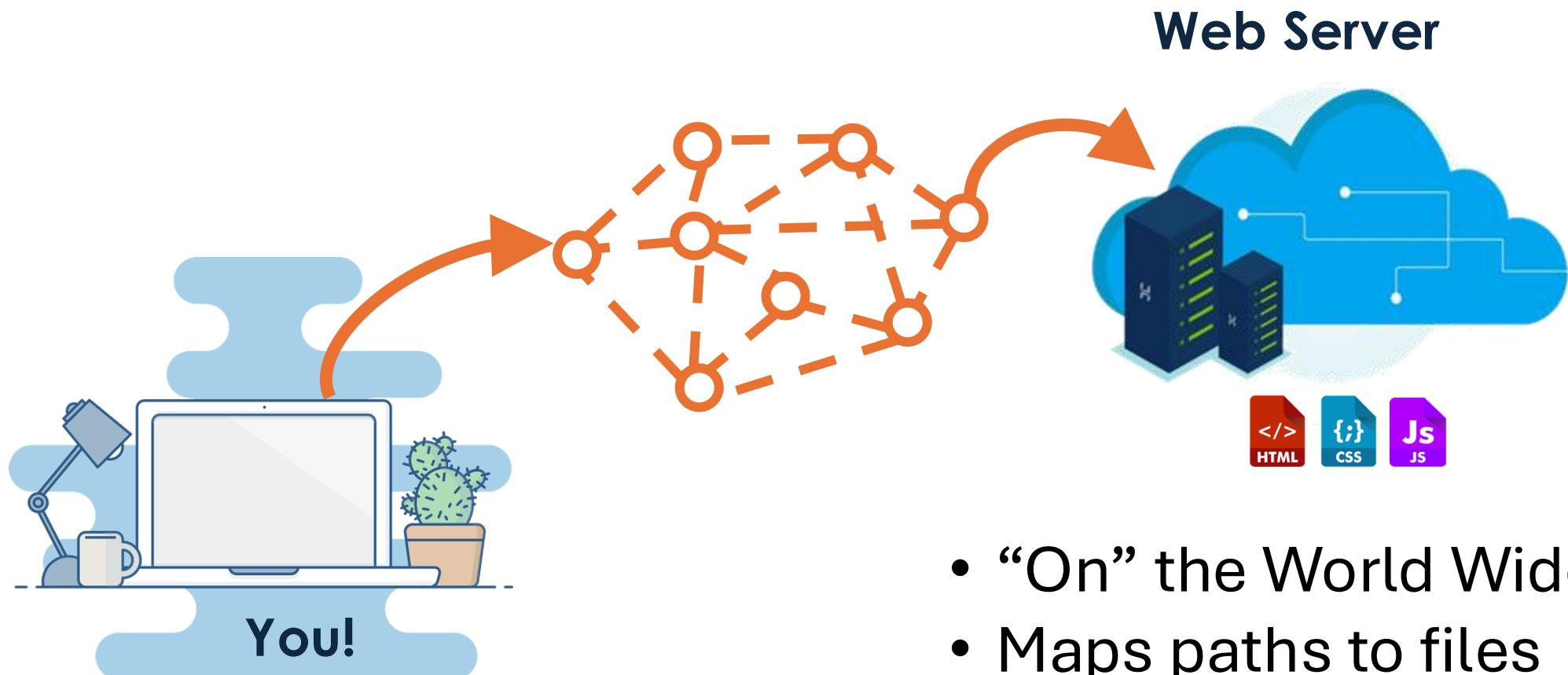
Apply now! Bootcamp runs 1 Jul – 12 Jul 2024
<https://www.tech-academy.com.au/winterschool2024-home>

Workshop Part 3 – Build a Basic Web App



- Today we'll be using Flask, a Python Web Dev Framework!
- We'll start with a basic form that runs our AI function.
- Then we'll make a more sophisticated webpage that gets us ready for our ongoing chat app.

How does the web work?



Workshop Part 4 – Keep chatting with AI with a better app!

With a chat history you can
get better responses and
keep the conversation
going!



Keep Learning AI and Web Dev!



Top AI And Web App picks

[Get Azure AI Access](#)

[Generative AI For Beginners Curriculum](#)

[Web Apps 101 – Flask on Azure](#)

[Implement Retrieval Augmented Generation with Azure OpenAI Service](#)

[Open Source AI Search with Ollama](#)

For Students

[Azure for Students](#)

[GitHub Student Developer Pack](#)

[Microsoft Learn Student Ambassadors](#)

Events & Community

Connect & join a [Microsoft Learn Learning Room – AI for Everyone](#)

[Microsoft Reactor](#) and [Meet Up](#) – online, in-person and on demand via YouTube

Self paced learning:

[Microsoft AI - Learning and Community Hub | Microsoft Learn](#)

[Browse all learning paths and modules - Training | Microsoft Learn](#)

[Embrace responsible AI principles and practices - Training | Microsoft Learn](#)

[Microsoft Responsible AI | Microsoft AI](#)