Creating Applications that can See, Hear, Speak and Understand

Using Azure Cognitive Services

<NAME>- <TITLE/COMPANY>
<TwitterHandle/Social>

Microsoft

"Azure Cognitive Services can help me build Intelligent Applications"

"Cognitive Services can be run in the cloud and on the edge"

“I can customize some services to build bespoke applications”

Azure Cognitive Services

Creating applications that can see, hear, speak and understand

Build it Yourself

https://aka.ms/ai-nights-beginner

Customized language understanding

Text-to-speech

Content moderation

Spell check

Speech translation

Custom image classification

Speaker recognition

Entity linking & augmentation

Sentiment analysis, key phrase extraction

Image tagging

Custom voice

Object detection

Text translation

Intend analysis

OCR handwriting

Emotion detection

Video insights

recognition

Custom translation

Face identification

Custom speech

Assisted text moderation

Speech transcription

AI

Vision

Speech

Language

Azure AI

Accelerate time to value with agile tools and services


Pretrained AI services


Powerful tools


Comprehensive platform

Innovate with AI everywhere – in the cloud, at edge, and on-premises


Cloud


Edge


On-premises

Use any language, any development tool and any framework

python PyTorch R ONNX TensorFlow Spark

Benefit from industry-leading security, privacy, compliance, transparency, and AI ethics standards

>90% of Fortune 500 companies use Microsoft Cloud

Azure AI

AI apps & agents

Azure Bot Service
Azure Cognitive Services

Knowledge mining

Azure Cognitive Search

Machine learning

Azure Databricks
Azure Machine Learning
Azure AI Infrastructure

Azure AI

AI apps & agents

Azure Bot Service
Azure Cognitive Services

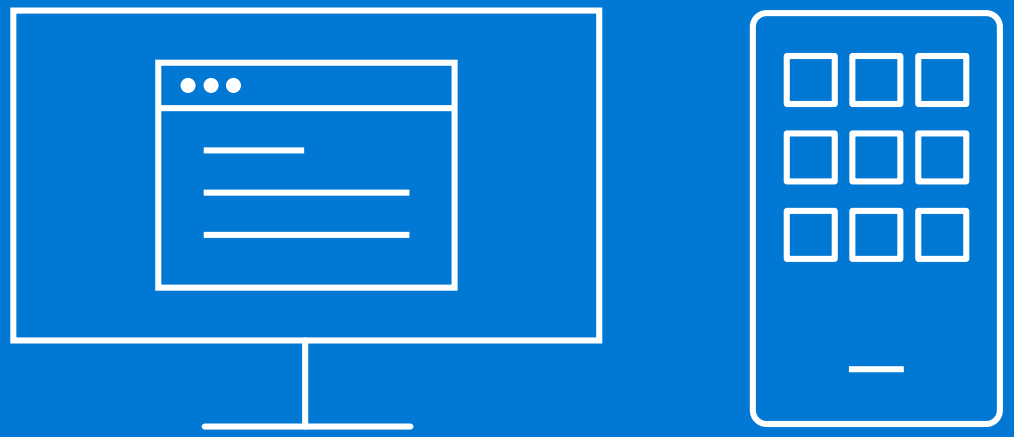
Knowledge mining

Azure Cognitive Search

Machine learning

Azure Databricks
Azure Machine Learning
Azure AI Infrastructure

Building AI apps & agents



Your apps

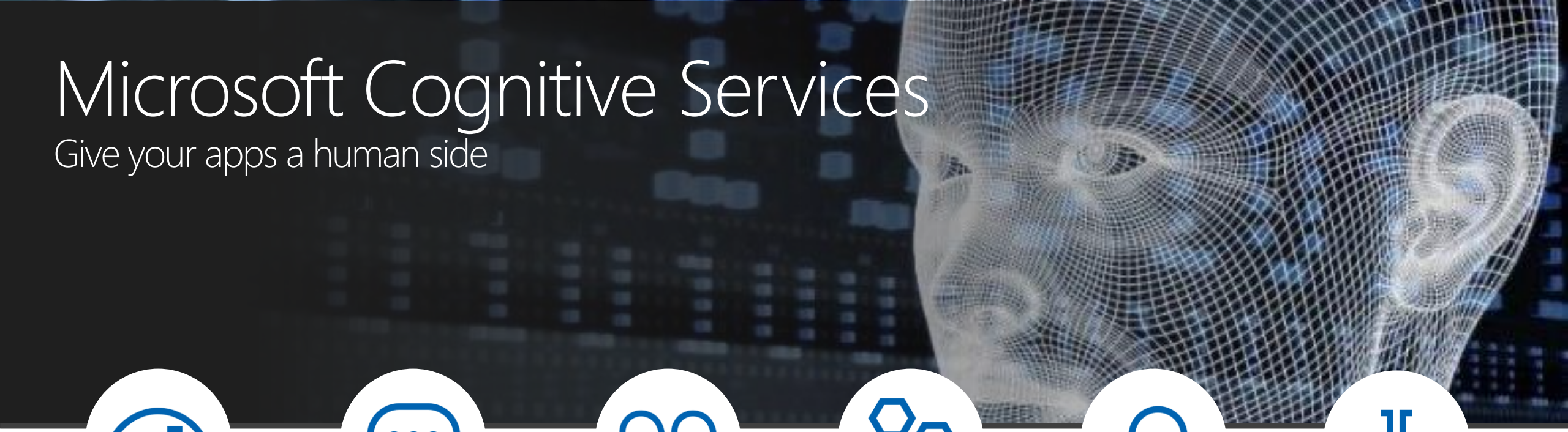
Vision

Speech

Language

Microsoft Cognitive Services

Give your apps a human side



Vision

From faces to feelings, allow your apps to understand images and video

Speech

Hear and speak to your users by filtering noise, identifying speakers, and understanding intent

Language

Process text and learn how to recognize what users want

Knowledge

Map complex information and data in order to solve specific tasks

Search

Access billions of web pages, images, videos, and news with the power of Bing

Labs

An early look at emerging Cognitive Services technologies: discover, try, and give feedback on new technologies before general availability

Why Microsoft Cognitive Services?

Easy

Roll your own with REST APIs

Simple to add: just a few lines of code required

Get a key, Build

Flexible

Integrate into the language and platform of your choice

Breadth of offerings helps you find the right services for your app

Bring your own data for your custom experience

Tested

Built by experts in their field from Microsoft Research, Bing, and Azure Machine Learning

Quality documentation, sample code, and community support

Demo

Azure Cognitive Services

https://aka.ms/ai-nights-beginner

Demo

Cognitive Services in Containers

https://aka.ms/ai-nights-beginner

Custom Vision

A customizable web service that learns to recognize specific content in imagery

Upload images

Upload your own labeled images, or use Custom Vision Service to quickly tag any unlabeled images

Train

Use your labeled images to teach Custom Vision Service the concepts you want it to learn

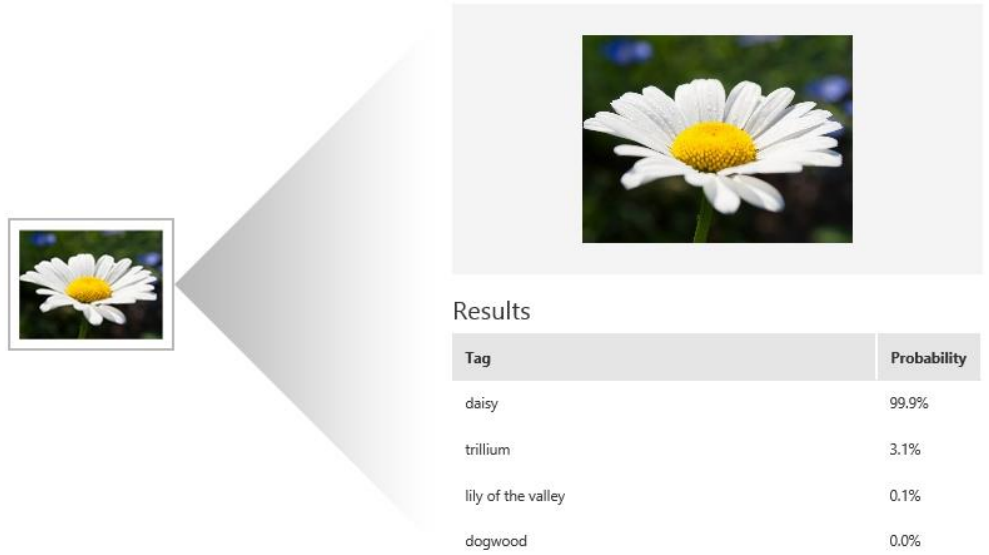
Evaluate

Use simple REST API calls to quickly tag images with your new custom computer vision model

Active learning

Images evaluated through your custom vision model become part of a feedback loop you can use to keep improving your classifier

Custom Vision

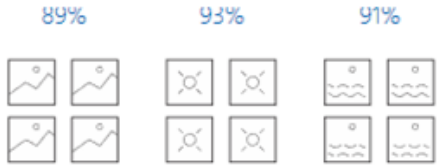


Upload Images

Bring your own labeled images, or use Custom Vision to quickly add tags to any unlabeled images.

Train

Use your labeled images to teach Custom Vision the concepts you care about.



Evaluate

Use simple REST API calls to quickly tag images with your new custom computer vision model.

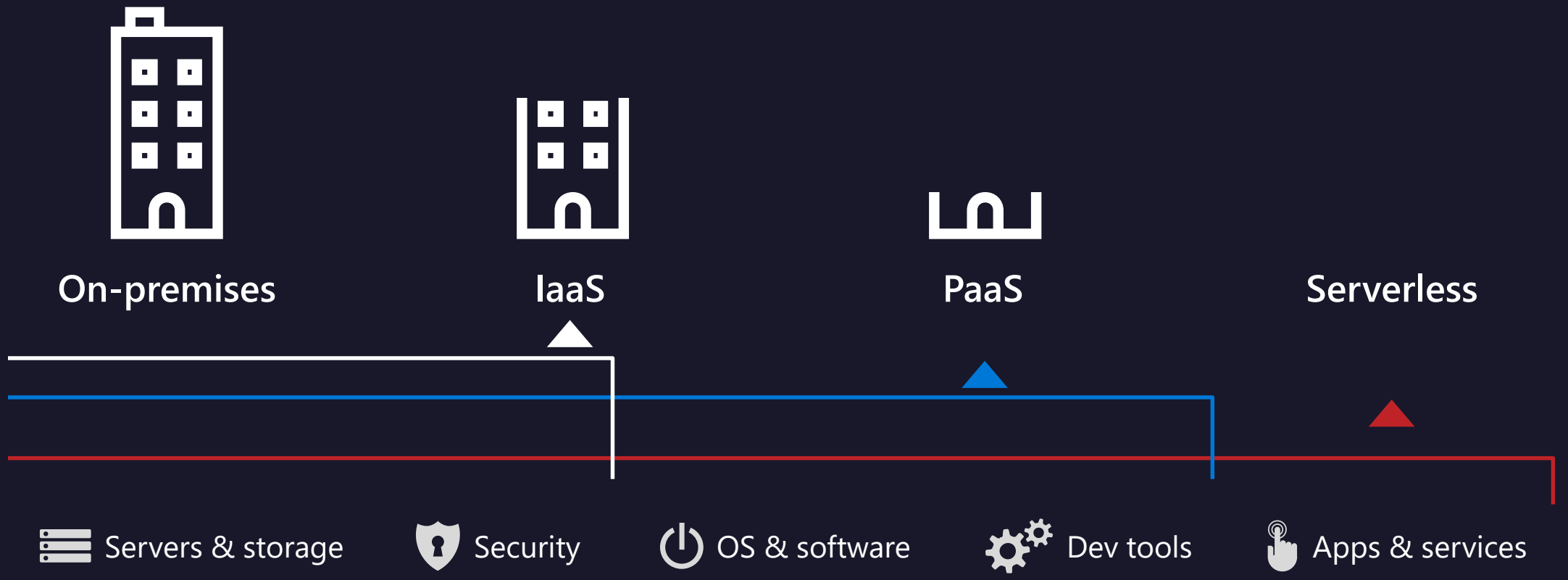
Demo

Azure Custom Vision

https://aka.ms/ai-nights-beginner

History of cloud development

Increasingly advanced cloud technologies have led companies to entrust more and more of their IT activities to service providers



What is serverless?

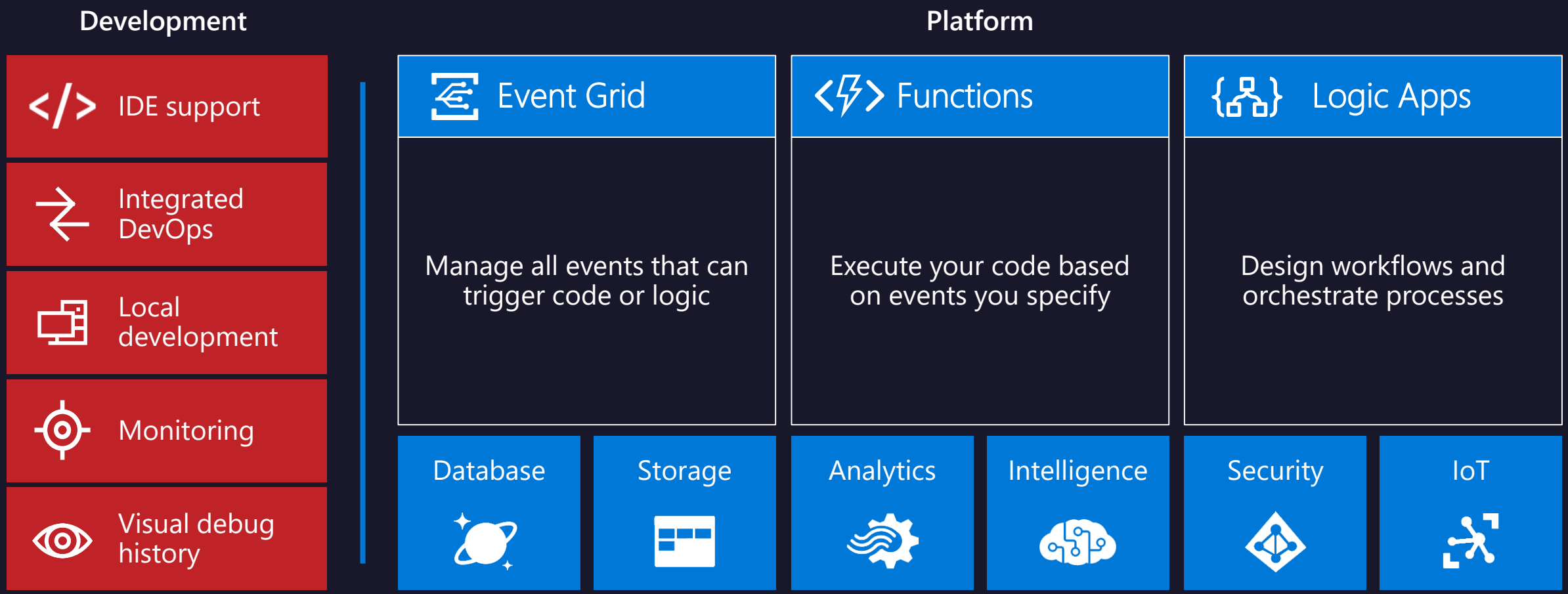
Full abstraction of servers
Developers can just focus on their code—there are no distractions around server management, capacity planning, or availability.

Instant, event-driven scalability
Application components react to events and triggers in near real-time with virtually unlimited scalability; compute resources are used as needed.

Pay-per-use
Only pay for what you use: billing is typically calculated on the number of function calls, code execution time, and memory used.*

*Supporting services, like storage and networking, may be charged separately.

Azure Serverless Ecosystem



Demo

Custom Vision and Logic Apps

https://aka.ms/ai-nights-beginner

Azure Cognitive Services

- Azure Cognitive Services can help me build intelligent applications
- Azure Cognitive Services can be run in the cloud and on the edge
- I can customize some services to build bespoke applications

Azure Cognitive Services

- **Cognitive Services Documentation:**
  https://aka.ms/gaib-cognitive
- **Custom Vision Service:**
  https://aka.ms/gaib-customvision
- **Cognitive Services in Containers:**
  https://aka.ms/gaib-cognitivecontainers

Azure Cognitive Services

Creating applications that can see, hear, speak and understand

Build it Yourself

https://aka.ms/ai-nights-beginner

Creating Applications that can See, Hear, Speak and Understand

Using Azure Cognitive Services

<NAME>- <TITLE/COMPANY>
<TwitterHandle/Social>

Microsoft