



The Cloud is
KING



Google Cloud



Microsoft
Azure

Cloud Comparison Cheat Sheet

blog.bytebytogo.com



Cloud Comparison Cheat Sheet

blog.bytebytogo.com





Microsoft
Azure



Oldest / Most Comprehensive
200 Global Locations
Hundreds of services
Pay-as-you-go pricing



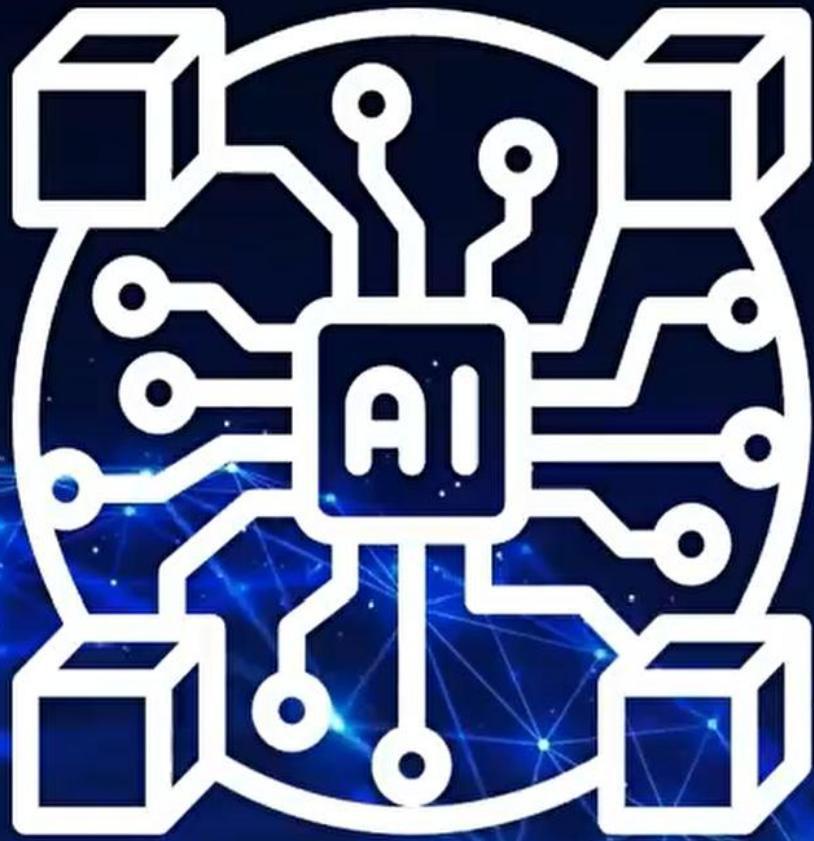
Google Cloud

Full Service Offering
Distinct AI/ML Services
Speed and pricing model



Microsoft
Azure

Integrated Solution
Microsoft Tools
Enterprise approach



Identify Data
Load Data to Cloud
Train Model
Deploy Model

Role



Collaborate
Lifecycle Management
Choosing Architecture

Data Processing and Storage

The background of the slide features a dark blue gradient with a subtle texture. Overlaid on this is a glowing blue network of interconnected lines and dots, resembling a complex web or a digital circuit. The network is more dense on the left side and tapers towards the right, creating a sense of depth and flow.

ETL Process



removing duplicates
handling missing values
formatting data

Amazon EMR
Google Cloud DatProc
Azure HDInsight



Storage



Amazon S3
Google Cloud Storage
Azure Blob Storage

Features



Unlimited scalability
Security
Redundancy



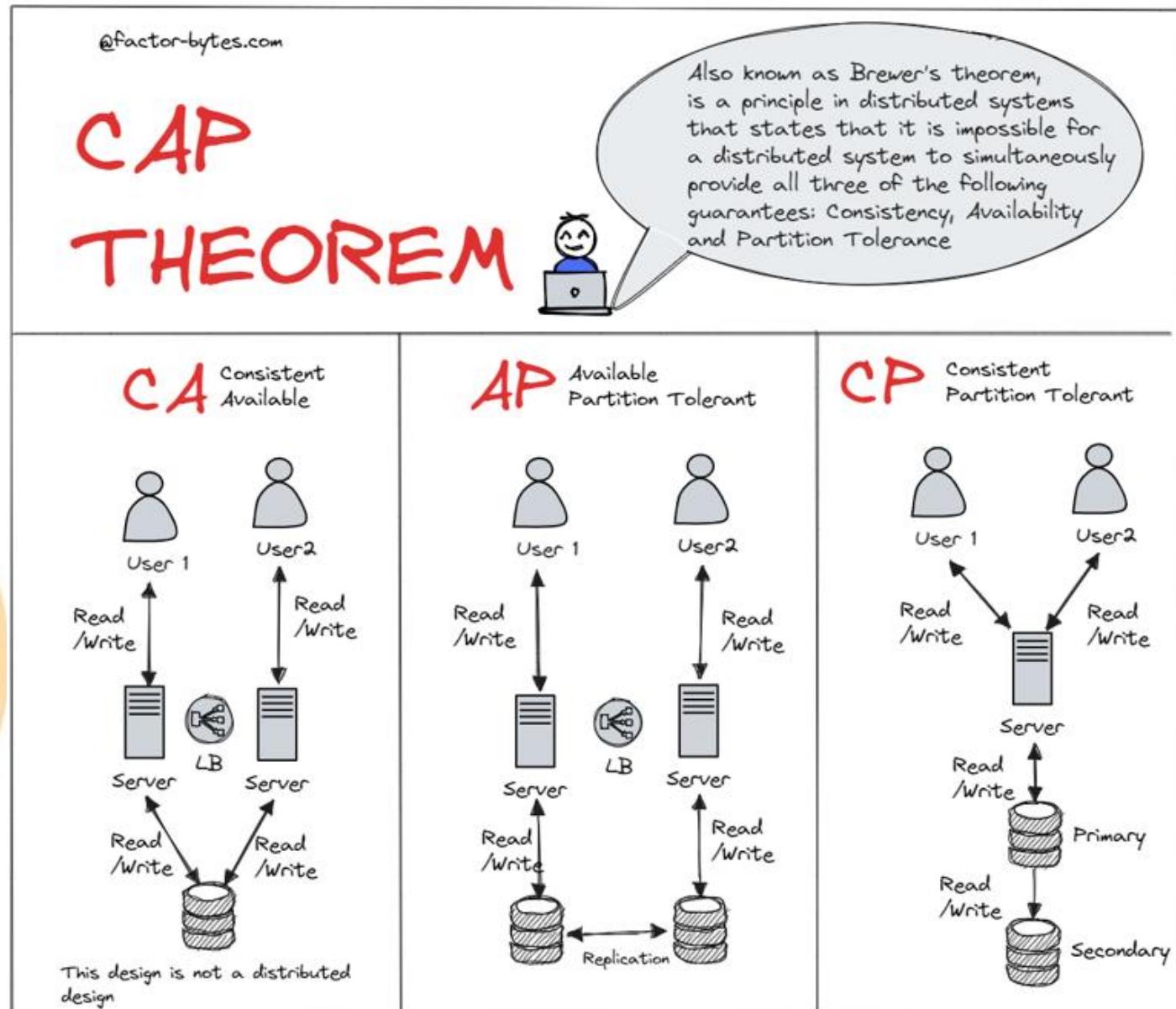
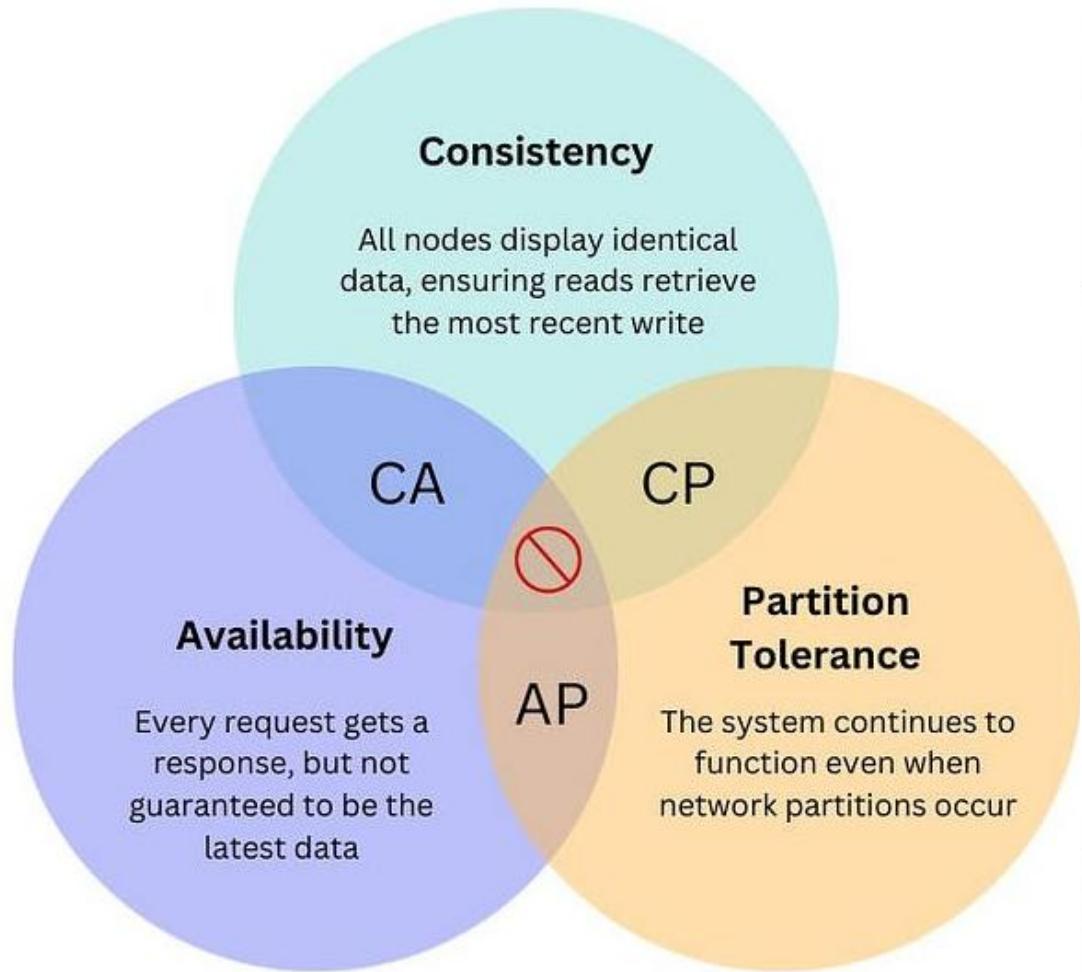
Consistency

CAP
THEOREM

Availability

Fault Tolerance

CAP Theorem

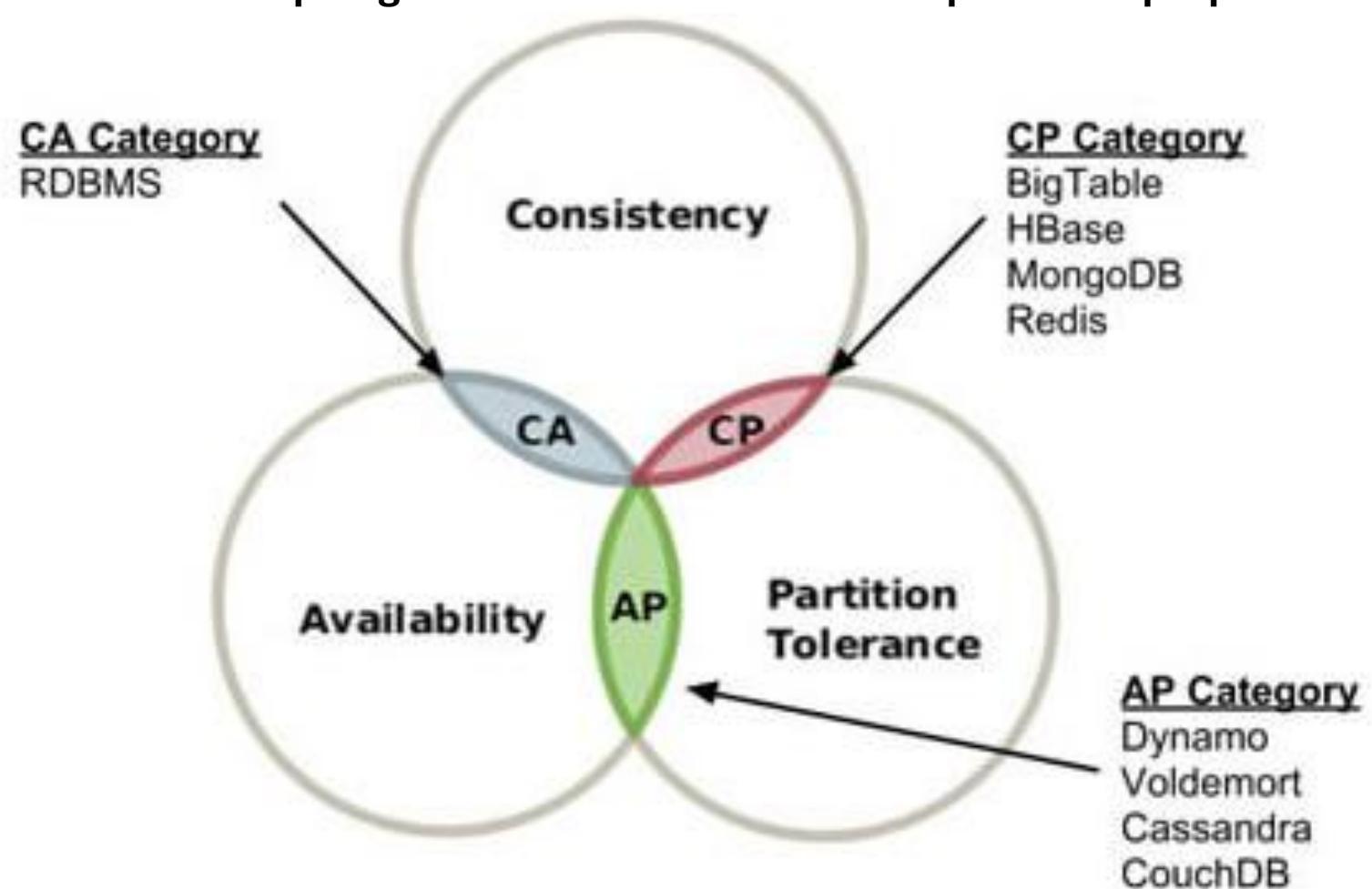


In un sistema distribuito è impossibile garantire simultaneamente tre proprietà:

1. Consistency (Coerenza): tutti i nodi vedono gli stessi dati allo stesso momento.
2. Availability (Disponibilità): ogni richiesta riceve una risposta.
3. Partition tolerance (Tolleranza alle partizioni): il sistema continua a funzionare nonostante le partizioni di rete.

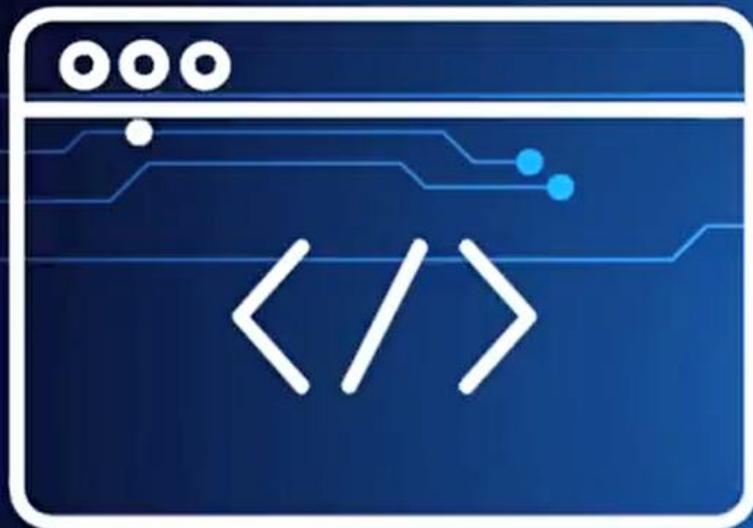
Secondo questo teorema, un sistema distribuito può garantire al massimo due di queste tre proprietà contemporaneamente.

CAP Theorem



Infrastructure as Code (IaC)





CODED

VS



MANUAL

IaC Benefits



Consistent Deployments
Fast Setup
Collaboration



HashiCorp

Terraform

Config File Driven
Multiple Provider Support
Versatile Option

PULUMI

Infrastructure as Code in Any Programming Language

Gain 10x better scale, more productivity, and faster time to market.



Pulumi



AWS Cloud Formation



AWS Cloud Formation

File or Script Driven

AWS Based

Multi-Region Support



Google Cloud Deployment Manager



Microsoft Azure
Resource Manager



**Reproducible
Model Training
Easy Deployments**

Containerization and Orchestration



App
Package



Easy
Deployments

Orchestration



Lifecycle Management
Version Control
Load Balancing



docker®



docker

Containerization
Portability
Version Control



kubernetes



kubernetes

Open-source
End-to-End Solution
High Availability



Amazon ECS

**Fully Managed
AWS Based
Load Balancing**



Azure Kubernetes Service (AKS)

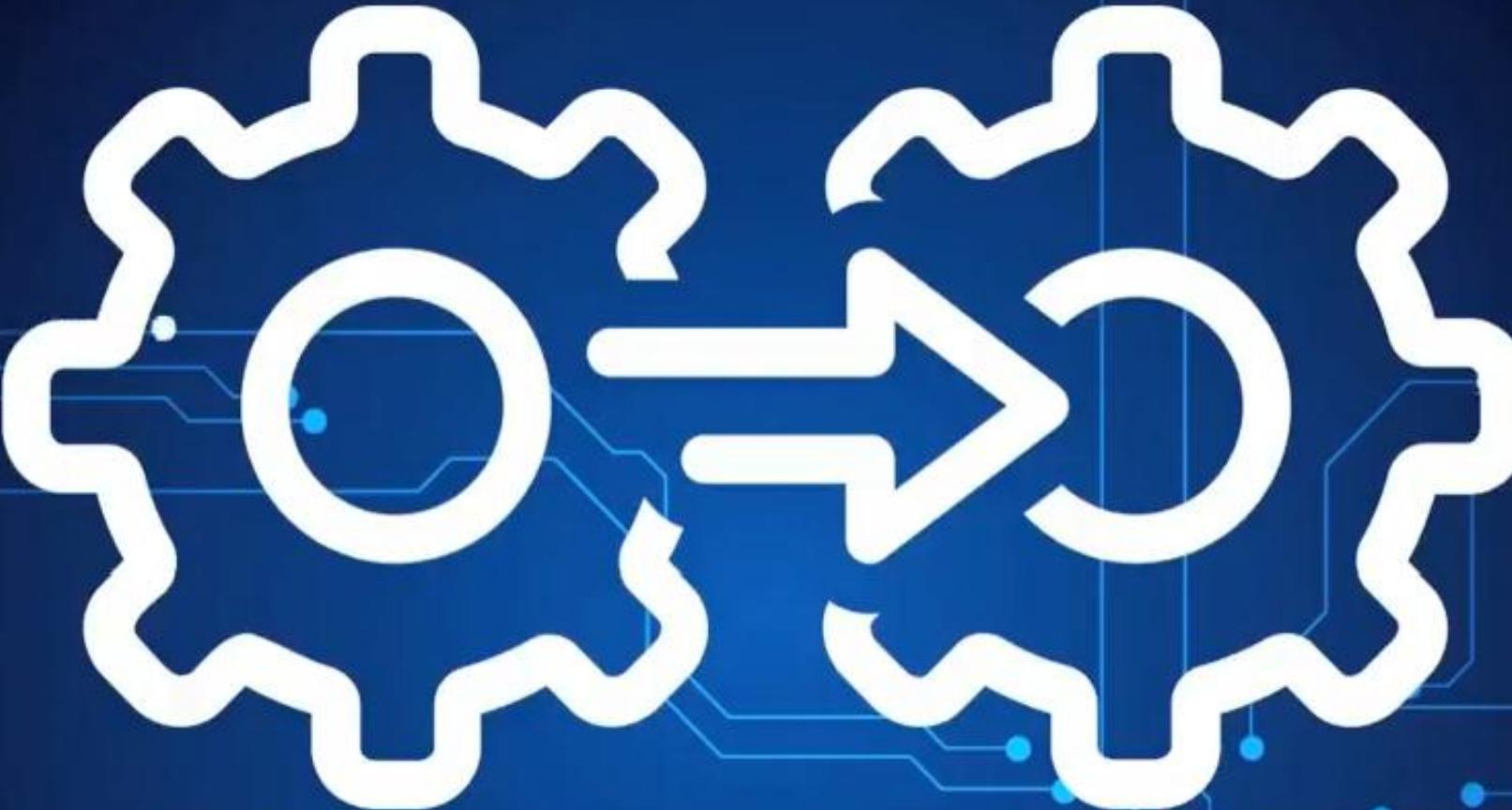


Google Cloud





CI/CD and Dev Ops



**Continuous
Integration**

**Continuous
Deployment**



Jenkins

Automated
Hundreds of Plugins
Open-source



GitLab

Security and Compliance





**Vast and Sensitive
Data**

Identity and Access Encryption Intrusion Detection Firewalls



The background features a dark blue gradient with a central circular pattern composed of concentric ellipses. Overlaid on this are several horizontal blue bars of varying lengths, some with a slight glow at their ends, resembling a digital interface or data visualization.

UNLOCK STATUS

SECRET UNLOCKED
PRIVATE UNLOCKED
CONFIDENTIAL UNLOCKED
TOP SECRET UNLOCKED
SECURITY UNLOCKED
DATA UNLOCKED



GLOBAL STATUS





AWS Security Hub



GCP Security Command Center



Azure Security Center



**Hard
Skills**



**Soft
Skills**

Machine Learning

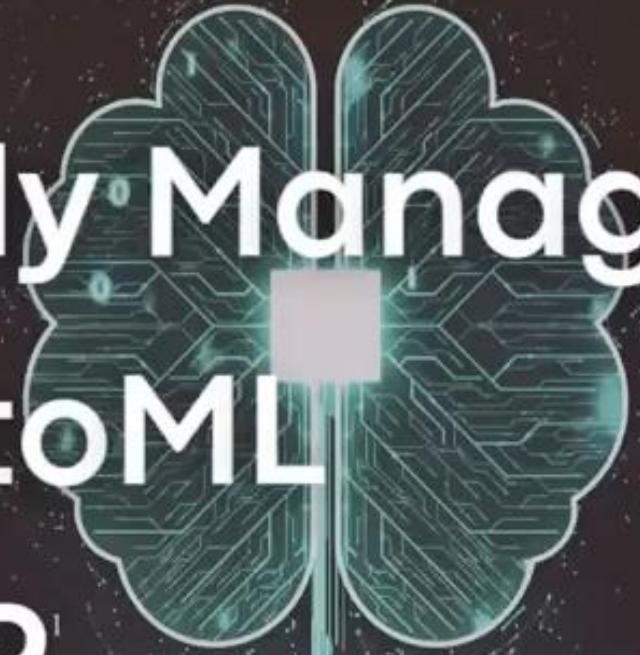
Amazon SageMaker



Fully Managed
Build
Train
Deploy



Google Cloud



Fully Managed
AutoML
NLP
Computer Vision



Microsoft
Azure

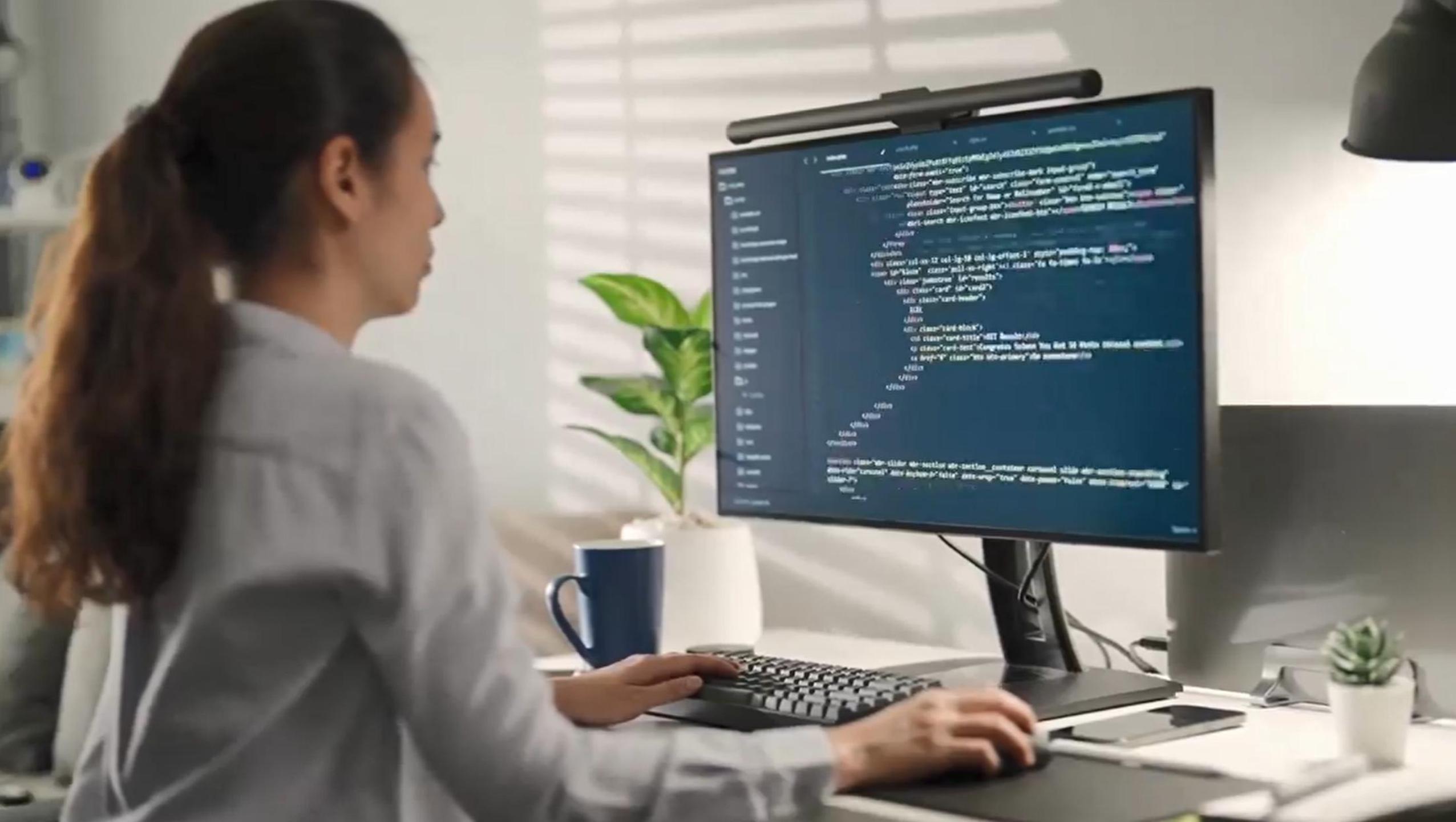
AzureML
End-to-End
Fully Managed











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