



AWS RESEARCH ROADSHOW – 4 APRIL 2023

Introduction to AWS

AWS Education & Research Team

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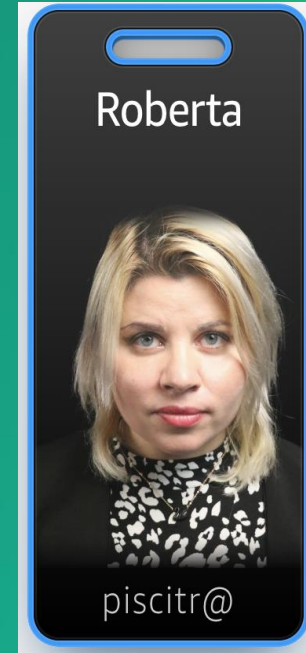
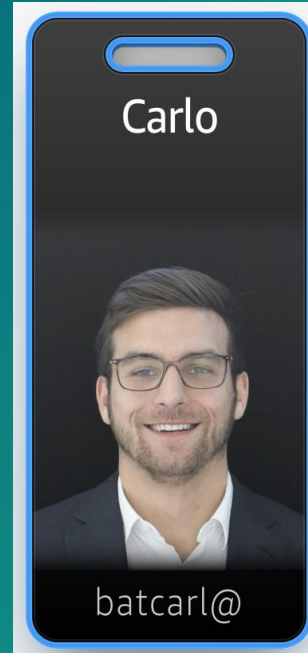
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Sales Manager

Tech BDM Research

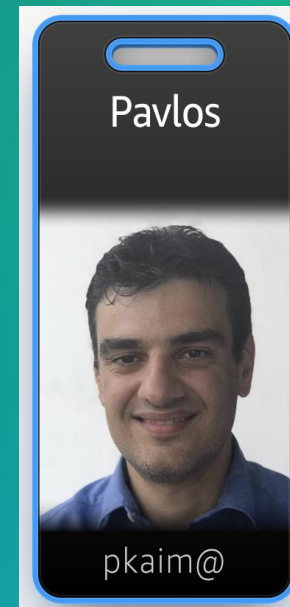
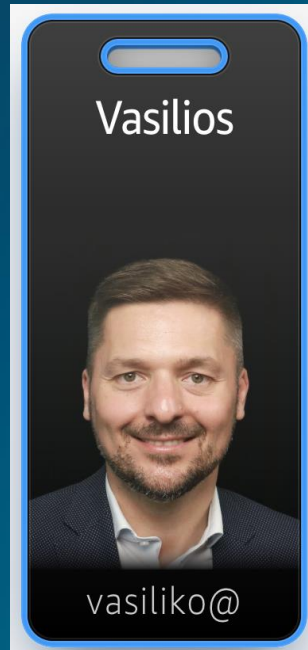
Edu Industry Sales Lead



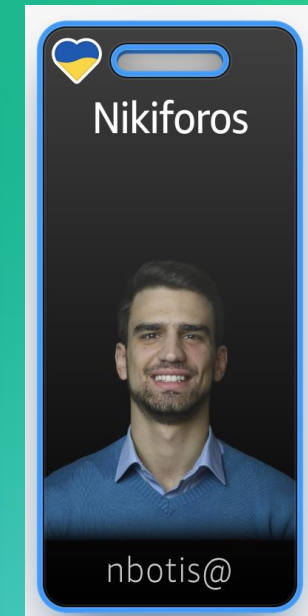
Public Sector AM

Sr. Public Sector AM

Sr. Public Sector PAM



Enterprise SA



Sr. Public Sector SA



Origins of AWS

The Amazon logo is centered in a white circle with an orange border. The logo consists of the word "amazon" in a lowercase, sans-serif font, with a curved orange arrow underneath it that starts under the letter 'a' and ends under the letter 'z'.

amazon

The AWS logo is centered in a dark blue circle with a white border. The logo consists of the letters "aws" in a lowercase, sans-serif font, with a curved orange arrow underneath it that starts under the letter 'a' and ends under the letter 's'.

aws

Global and National Infrastructure

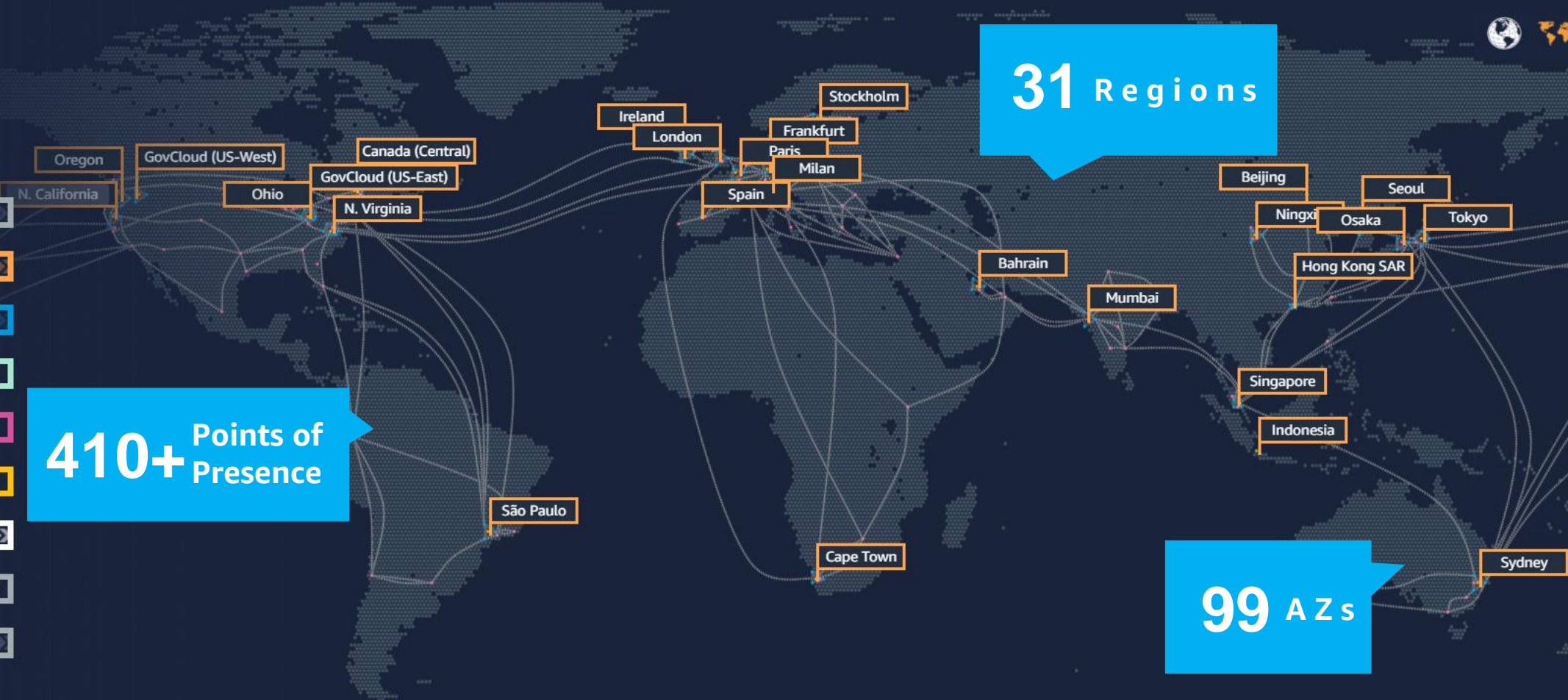
DISCOVER
HOW WE DO IT

- Global Infrastructure >>>
- Regions >>>**
- Availability Zones >>>
- Local Zones >>>
- Points of Presence >>>
- Ground Stations >>>
- Network >>>
- Custom Hardware >>>
- Benefits >>>

410+ Points of Presence

31 Regions

99 AZs



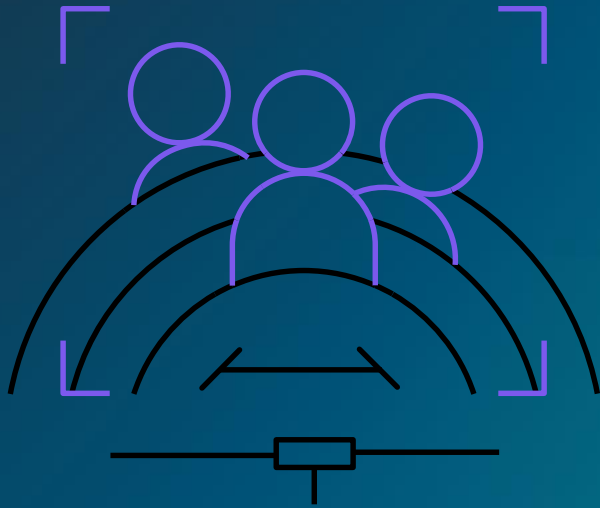
Share

Key

- Region (orange circle)
- Region (coming soon) (green circle)
- AZ (blue circle)
- LZ (light blue circle)
- PoP (pink circle)
- Network (grey dots)



Customer obsessed



90%

of our roadmap originates with customer requests
and are designed to meet **specific needs**

AWS Services

ANALYTICS

ANALYTICS	STREAMING
DATA EXCHANGE	ETL
DATA LAKE	HADOOP/SPARK
DATA PIPELINES	INTERACTIVE SQL QUERIES
DATA WAREHOUSE	VISUALIZATIONS
ELASTICSEARCH	

AR + VR

AR/VR EXPERIENCES

AWS COST MANAGEMENT

ANALYZE AWS COSTS
COST & USAGE BUDGETS
COST & USAGE REPORTS
RESERVED INSTANCES REPORTING

APPLICATION INTEGRATION

EMAIL	SEARCH
MESSAGE BROKER	TRANSCODING
QUEUEING & NOTIFICATIONS	WORKFLOW

BUSINESS APPLICATIONS

EMAIL & CALENDARING	UNIFIED COMMUNICATIONS
ONLINE MEETINGS	VOICE-ENABLED WORKPLACE
SHARING & COLLABORATION	

BLOCKCHAIN

BLOCKCHAIN TEMPLATES
LEDGER DATABASE
MANAGED BLOCKCHAIN

CUSTOMER ENGAGEMENT

CONTACT CENTER
EMAIL MARKETING
USER ENGAGEMENT ACROSS CHANNELS

COMPUTE

COMPUTE	CONTAINERS
AUTO SCALING	CONTAINER SERVICE
BATCH JOBS	MANAGED KUBERNETES
EVENT-DRIVEN SERVERLESS COMPUTING	STORE & RETRIEVE DOCKER IMAGES
INSTANCE TYPES	
MANAGED VIRTUAL PRIVATE SERVERS	
MANAGED REPOSITORY FOR SERVERLESS APPS	
RUN & MANAGE WEB APPS	
SERVERLESS COMPUTE	
VIRTUAL SERVERS	

DATABASE

REALTIONAL DATABASES	PURPOSE-BUILT DATABASES
HIGH-PERFORMANCE RELATIONAL DATABASE BUILT FOR THE CLOUD	DOCUMENT DATABASE
MANAGED MARIADB	GRAPH DATABASE
MANAGED MYSQL	IN-MEMORY CACHING
MANAGED ORACLE	KEY-VALUE STORE DATABASE
MANAGED POSTGRESQL	LEDGER DATABASE
MANAGED SQL SERVER	TIME SERIES DATABASE

DEVELOPER TOOLS

ANALYZE & DEBUG
APPLICATION LIFECYCLE MANAGEMENT
AUTHORING
BUILD & TEST
CONTAINERS
DEVOPS RESOURCE MANAGEMENT
ONE-CLICK APP DEVELOPMENT
PATCHING
PIPELINE ORCHESTRATION
RESOURCE TEMPLATES

END USER COMPUTING

APP STREAMING	MOBILE ACCESS
DESKTOP COMPUTING	STORAGE & COLLABORATION

HYBRID ARCHITECTURE

AWS SERVICES ON PREMISES	INTEGRATED NETWORKING
DATA INTEGRATION	INTEGRATED RESOURCE & DEPLOYMENT MANAGEMENT
INTEGRATED DEVICES & EDGE SYSTEMS	VMWARE CLOUD ON AWS
INTEGRATED IDENTITY & ACCESS	

GAME TECH

CROSS-PLATFORM 3D GAME ENGINE
GAME SERVER HOSTING

INFRASTRUCTURE

AVAILABILITY ZONES
CUSTOM HARDWARE
DATA CENTER INFRASTRUCTURE
GLOBAL NETWORK BACKBONE
POINTS OF PRESENCE
POWER INFRASTRUCTURE
REGIONS

INTERNET OF THINGS (IOT)

RULES ENGINE
DEVICE ANALYTICS
DEVICE GATEWAY
DEVICE SDK
DEVICE SHADOWS
EVENT DETECTION & RESPONSE
LOCAL COMPUTE
LOCAL DATA COLLECTION
MANAGEMENT & SECURITY
MICROCONTROLLER OPERATING SYSTEM
REGISTRY
VISUAL APPLICATIONS DEVELOPMENT

MACHINE LEARNING

ML FRAMEWORKS	SAGEMAKER
DEEP LEARNING AMIs & CONTAINERS	AUTOMATIC MODEL TUNING
HARDWARE ACCELERATION	DATA LABELING
ML AT THE EDGE	HOSTED NOTEBOOKS
TENSORFLOW, PYTORCH, MXNET	ML MARKETPLACE
	MODEL HOSTING
	MODEL OPTIMIZATION
	MODEL TRAINING
AI SERVICES	PRE-BUILT ALGORITHMS
CHATBOTS	TOPIC MODELING
ENTITY EXTRACTION	DEEP LEARNING MODELS
FACE ANALYTICS	REINFORCEMENT LEARNING
FACE SEARCH	SPOT INSTANCES
FORECASTING	BATCH PREDICTIONS
IMAGE LABELING	REAL-TIME PREDICTIONS
NATURAL LANGUAGE PROCESSING	
PERSONALIZATION & RECOMMENDATION	
SENTIMENT ANALYSIS	
SPEECH TRANSCRIPTION	
TEXT & DATA EXTRACTION	
TEXT TO SPEECH	
TRANSLATION	
VIDEO & IMAGE ANALYSIS	
CONTENT MODERATION	

MANAGEMENT & GOVERNANCE

ACTIVITY & API USAGE TRACKING	MONITORING
CHATBOT	PROVISIONING
CONFIGURATION TRACKING	RESOURCE TEMPLATES
GOVERNANCE	SECURITY RECOMMENDATIONS
INVENTORY TRACKING	SERVER MANAGEMENT
LICENSE MANAGER	SERVICE CATALOG
MANAGE POLICIES	SYSTEMS MANAGER
MANAGE RESOURCES	

MARKETPLACE

ANALYTICS	MACHINE LEARNING
DATA PRODUCTS	NETWORKING
DATABASES	OPERATING SYSTEMS
DEVOPS	SECURITY
IOT	STORAGE

MEDIA SERVICES

LIVE VIDEO TRANSPORT	VIDEO PERSONALIZATION & MONETIZATION
MEDIA STORAGE	VIDEO PROCESSING & DELIVERY
TRANSCODING	
VIDEO ORIGATION & PACKAGING	VIDEO STREAMING ANALYSIS

MIGRATION & TRANSFER

APPLICATION MIGRATION
DATABASE MIGRATION
EXABYTE-SCALE MIGRATION
ONLINE DATA TRANSFER
SCHEMA CONVERSION
SERVER MIGRATION
TRANSFER FOR SFTP

MOBILE

API GATEWAY	MOBILE APP TESTING
DEVELOPMENT FRAMEWORK	SINGLE INTEGRATED CONSOLE
IDENTITY	SYNC
MOBILE ANALYTICS	TARGETED PUSH NOTIFICATIONS

NETWORKING & CONTENT DELIVERY

APPLICATION DELIVERY
DEDICATED NETWORK CONNECTION
DOMAIN NAME SYSTEM
LOAD BALANCING
MONITOR APIS
MONITOR MICROSERVICES
NETWORK TOPOLOGY
NETWORKING HUB
PRIVATE CONNECTION TO APPS
SCALE VPC & ACCOUNT CONNECTIONS
SERVICE DISCOVERY
VIRTUAL PRIVATE CLOUD

ROBOTICS

CLOUD ROBOTICS

SATELLITE

SATELLITE OPERATIONS

SECURITY, IDENTITY, & COMPLIANCE

ACCESS CONTROL
ASSESSMENT & REPORTING
CONFIGURATION COMPLIANCE
DATA PROTECTION
DDOS PROTECTION
IDENTITY MANAGEMENT
KEY MANAGEMENT & STORAGE
MONITORING & LOGGING
RESOURCE MANAGEMENT
THREAT DETECTION
WEB APPLICATION FIREWALL

STORAGE

ARCHIVE STORAGE
BACKUP & RESTORE
BLOCK STORAGE
DATA TRANSFER
EDGE PROCESSING & COMPUTING
FILE STORAGE
HIGH-PERFORMANCE FILE SYSTEM
HYBRID CLOUD STORAGE
OBJECT STORAGE
WINDOWS FILE SYSTEM

CUSTOMER ENABLEMENT

ACCOUNT MANAGEMENT
DASHBOARD PERSONALIZATION
ENTERPRISE SUPPORT
EXPERTS MARKETPLACE
OPTIMIZATION GUIDANCE
PARTNER ECOSYSTEMS
PROFESSIONAL SERVICES
SECURITY & BILLING REPORTS
SOLUTIONS MANAGEMENT
TRAINING & CERTIFICATION



It's Greener in AWS Cloud!

Organizations in Europe that move to the AWS cloud can **reduce their energy consumption by approximately 80%** compared to using traditional infrastructure.*

Organizations can **reduce their carbon footprint by up to 96% by 2025**, when AWS will be powered by **100% renewable energy**.*

Amazon will be **net-zero by 2040**, which is 10 years before the Paris Agreement.

AWS will be **water-positive** within 2030.

*Source: [451 Research report](#)

amazon | science

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Customer-obsessed science

From the blog [View all](#)

The latest research from Amazon scientists.

Using hypergraphs to improve product retrieval

March 10, 2023

Augmenting query-product graphs with hypergraphs describing product-product relationships improves recall score by

The science behind Astro's graceful, responsive motion

March 09, 2023

Predictive planning, uncertainty modeling, uniquely constrained trajectory

From structured search to learning-to-rank-and-retrieve

March 07, 2023

Using reinforcement learning improves candidate selection and ranking for search

Conference calendar

The Web Conference 2023
INFORMATION AND KNOWLEDGE MANAGEMENT
 April 30 - May 4, 2023

ICLR 2023
MACHINE LEARNING
 May 1 - 5, 2023

ICRA 2023

RESEARCH AREAS

- Automated Reasoning
- Cloud and system
- Computer Vision
- Conversation AI / Natural-Language Processing
- Economics
- Information and knowledge management
- Machine learning
- Operation Research and optimization
- Quantum technologies
- Robotics
- Search and information retrieval
- Security, Privacy and abuse prevention
- Sustainability



Thank you!

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