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# Creating a Minecraft Server using **aws**

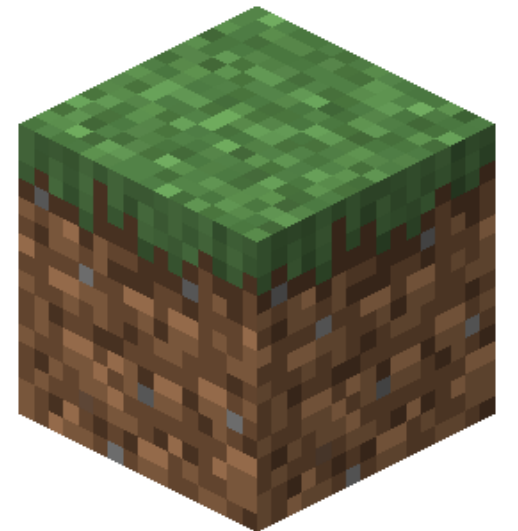
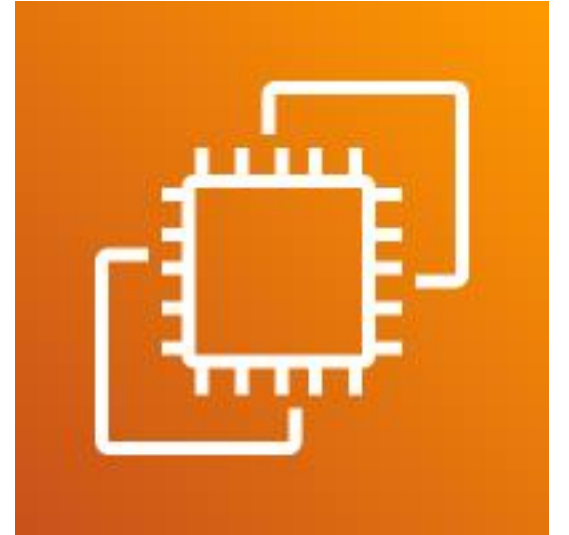
*By: Juan Peñuela*



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# What You'll Learn Today

- What is Cloud Computing, and why it plays an important role in today's world.
- What is Amazon Web Services and key concepts of Cloud Computing.
- You'll learn what is Amazon Identity Access Manager (IAM) to keep your AWS accounts protected.
- You'll learn about Amazon Elastic Cloud Compute (EC2) and deploy your own instances.
- You'll deploy your own Minecraft server to play with your friends!
- You'll learn about Network Monitoring using the AWS CloudWatch service



# About Me

- 2x Intern at USAA
- Incoming Software Engineer Analyst at BNY
- Certified AWS Cloud Practitioner



**BNY**





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# What is Cloud Computing?



*“the practice of using a network of remote servers hosted on the internet to store, manage, and process data, rather than a local server or a personal computer.” – Oxford Dictionary*

Some of the most popular Cloud providers are:

- Azure (Microsoft)
- Google Cloud
- Amazon Web Services

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# Why is it Relevant in the Industry Today?



**Scalability & Cost Efficiency** – Cloud computing allows businesses to scale resources up or down based on demand, reducing the need for expensive on-premise infrastructure and lowering operational costs.



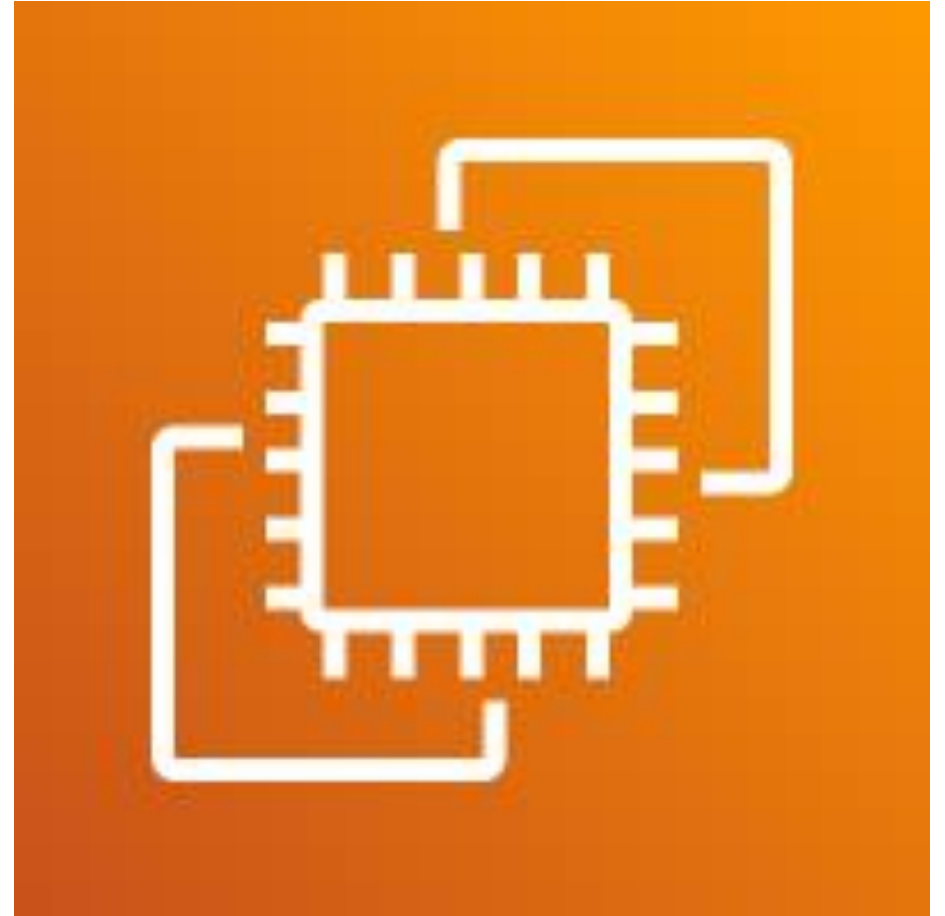
**Flexibility & Remote Access** – Cloud services enable employees to access data and applications from anywhere, supporting remote work, global collaboration, and real-time updates.



**Security & Reliability** – Leading cloud providers offer robust security measures, automated backups, and high availability, ensuring business continuity and data protection.

# Amazon Elastic Cloud Compute (EC2)

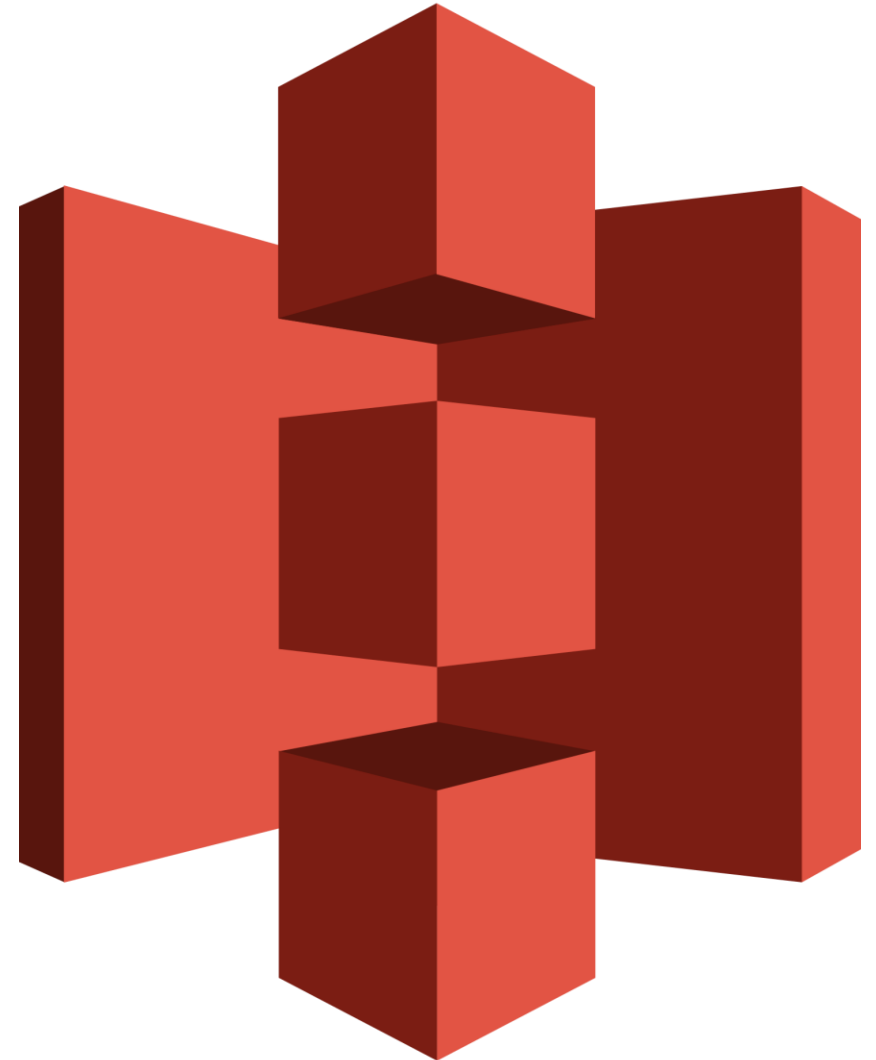
- Virtual servers in the cloud that allow users to run applications without managing physical hardware.
- Provides flexible compute capacity with various instance types optimized for different workloads.
- Supports auto-scaling, load balancing, and pay-as-you-go pricing for cost efficiency.



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# Amazon Simple Storage Service (S3)

- Scalable object storage for storing and retrieving data, such as files, backups, and media.
- Offers high durability (99.999999999%) and availability across multiple regions.
- Supports features like versioning, lifecycle policies, and fine-grained access control.



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# Amazon Identity Access Manager (IAM)

- Manages user access and permissions for AWS resources securely.
- Provides fine-grained access control through policies, roles, and user groups.
- Supports multi-factor authentication (MFA) and federated access for enhanced security.





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# Monitoring Metrics with CloudWatch

- Monitoring and observability service that collects and tracks metrics, logs, and events from AWS resources.
- Enables setting up alarms and automated responses to system performance changes.
- Provides dashboards and insights to analyze application performance and optimize resources.





LET'S MAKE A MINECRAFT  
SERVER!

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**DO IT  
YOURSELF!  
Notes Here**



# Ideas to add this project to your resume

- **Deployed a Minecraft server on AWS EC2**, configuring instance types, security groups, and storage for optimal performance.
- **Implemented CloudWatch monitoring**, setting up custom metrics, alarms, and logs to track server performance and uptime. (add numbers to these metrics as you work on it)
- **Optimized server scalability and availability**, utilizing auto-recovery features and fine-tuning resource allocation. (perhaps mention the type of AMIs or instance types you used)
- **Configured IAM roles and security groups**, ensuring controlled access and secure server management.



If you have more questions related to resumes, send me a message!