

AWS re:Invent 2023



<https://github.com/iportilla/aws>

- Intros
- Farnaz
- Patrick
- Ivan
- Resources

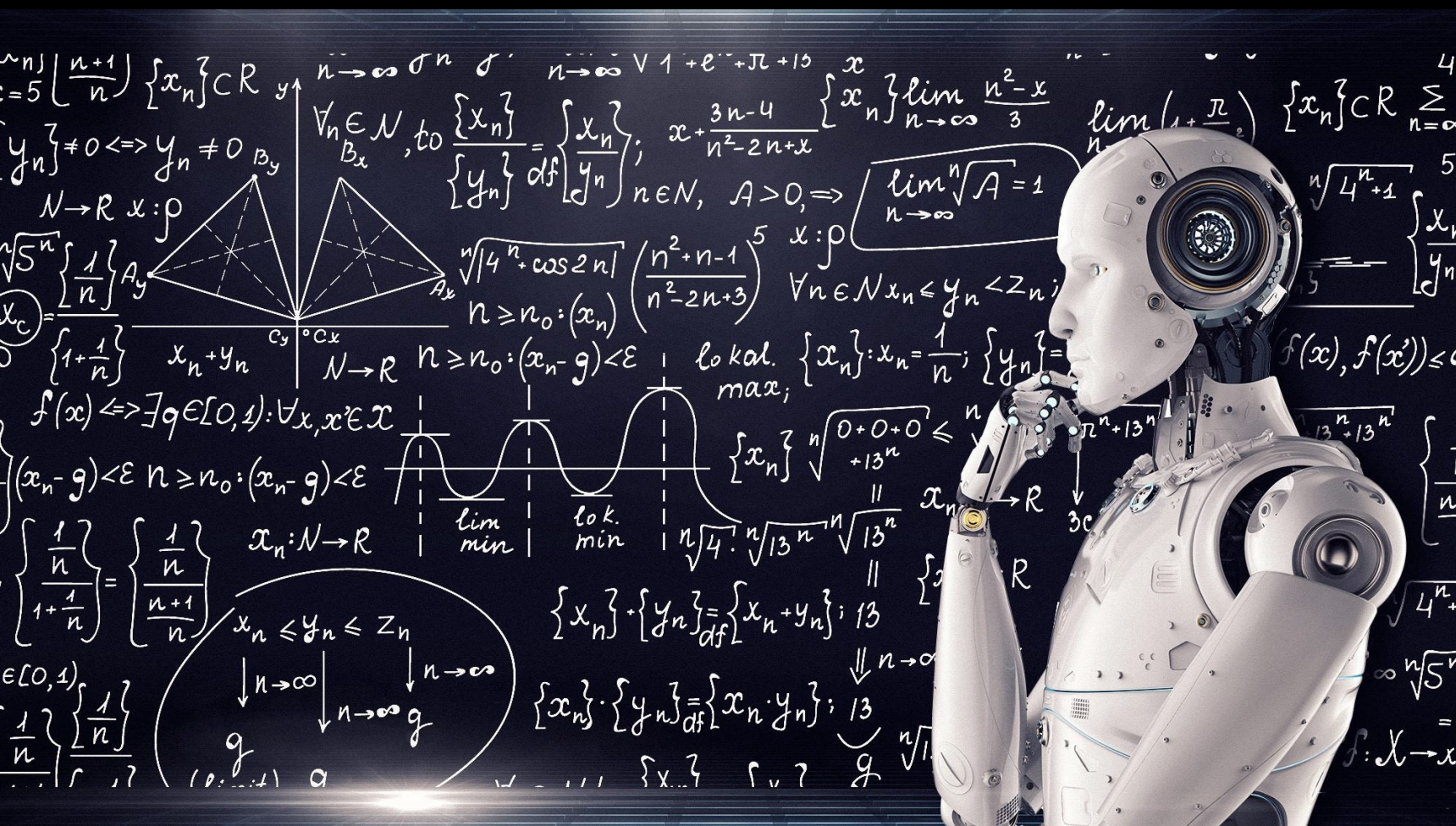


- Intros
- Farnaz
- Patrick
- Ivan
- Resources



- Intros
- Farnaz
- Patrick
- Ivan
- Resources





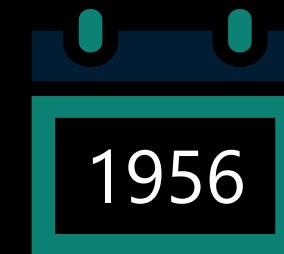
- GenerativeAI (Bedrock)
- AI for good
- Lab

Artificial Intelligence

Machine Learning

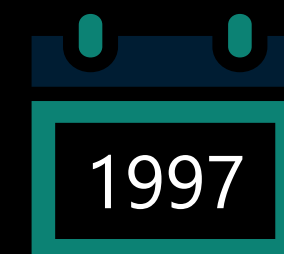
Deep Learning

Generative AI



Artificial Intelligence

Intelligence demonstrated by machines



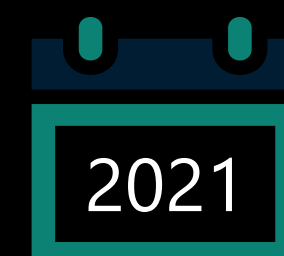
Machine Learning

Learn from data



Deep Learning

Model after the human brain (Neural Networks)



Generative AI

Create new written, visual, and auditory content

GenAI


1. Amazon Q
2. Code Whisperer
3. Open Search

Amazon Q

GenAI powered expert on patterns in the AWS Framework, best practices, documentation, & solution implementations

<https://aws.amazon.com/q/>

Amazon Q Preview



Hello! I'm Amazon Q, your AWS generative AI assistant.

Ask me anything about AWS services and features or choose a sample question below to start a conversation.

Why can't I SSH to my EC2 instance?

What is the CLI command to list all the t3.micro instances in my account?

How can I deploy a containerized web application to AWS?

I'm learning more every day. Help me improve by [providing feedback](#). Visit the [Amazon Q documentation](#) for more information.

Additional info

Amazon Q may retain chats to provide and maintain the service. Amazon Q stores and processes your data in the N. Virginia (us-east-1) Region, even if the AWS Management Console is set to a different AWS Region.

Amazon Q Preview

How can I add a role in SageMaker

Here are the steps to add a role in Amazon SageMaker:

1. Open the IAM console at <https://console.aws.amazon.com/iam> [\(link\)](#)
2. Choose Roles and then choose Create role.
3. For the trusted entity, select AWS service.
4. Choose SageMaker for the use case.
5. On the next page, relevant SageMaker permissions will be automatically attached. You can optionally attach additional permissions as needed.
6. Choose Next: Tags to add any tags for identifying and organizing the role.
7. Review the role details and give it a descriptive name.
8. Choose Create role. The new role can now be used for SageMaker activities by the appropriate IAM users or resources.

For more details on creating and managing roles for SageMaker, refer to the documentation on <https://aws.amazon.com/sagemaker> or the SageMaker console help. The Role Manager in SageMaker console can also simplify the process of adding roles for common use cases.

Sources

- [1] [Using the role manager \(console\) - Amazon SageMaker](#)
- [2] [Creating a new SageMaker execution role - Amazon SageMaker](#)
- [3] [Role Manager FAQs - Amazon SageMaker](#)

Ask me anything about AWS

➤

Max 1000 characters

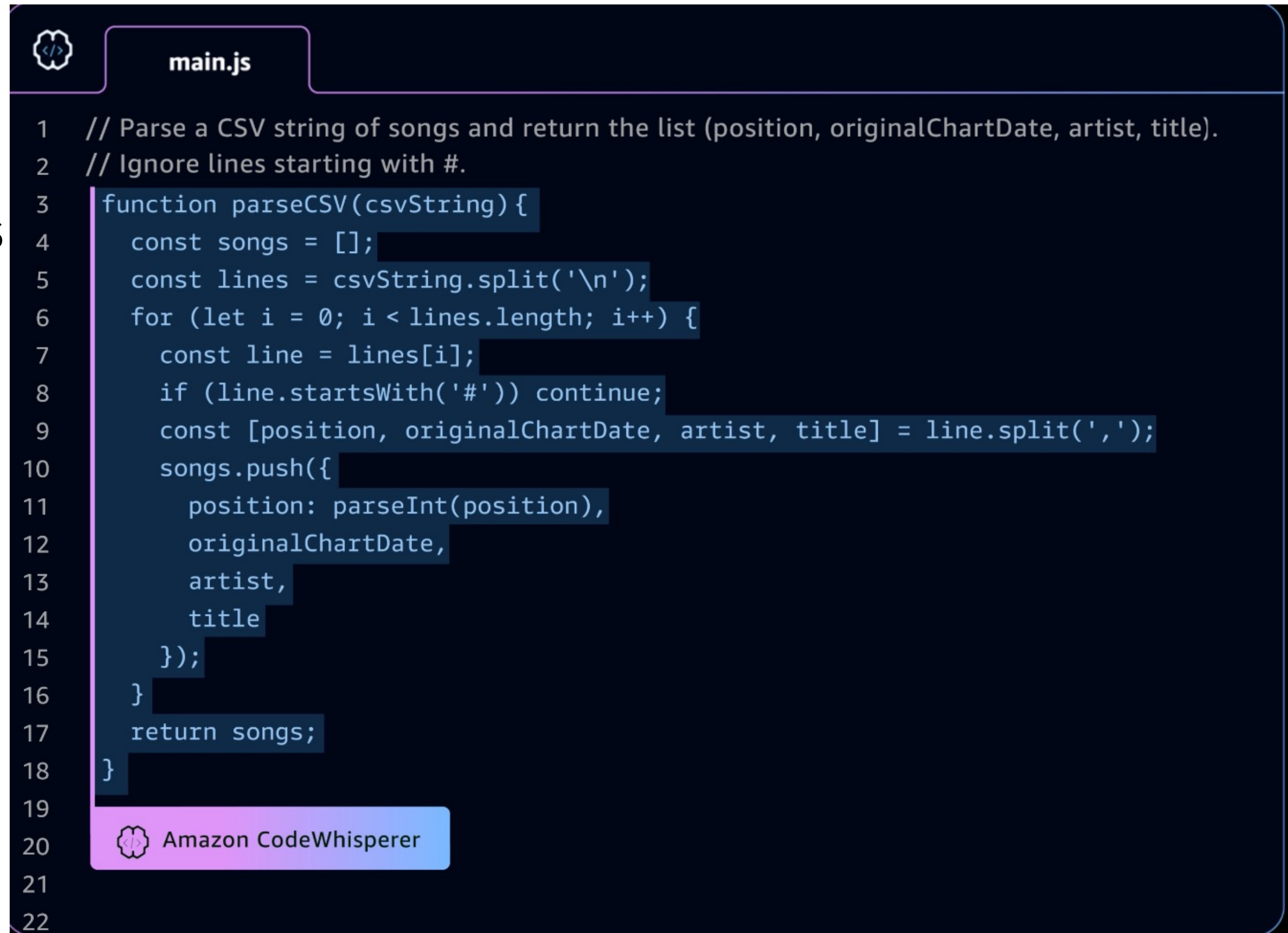
Use of Amazon Q is subject to the [AWS Responsible AI Policy](#)

Code Whisperer

Generates code suggestions from snippets to full functions in real time in the IDE based on your comments and existing code.

It supports CLI completions and natural-language-to-bash translation in the command line.

<https://aws.amazon.com/codewhisperer/>

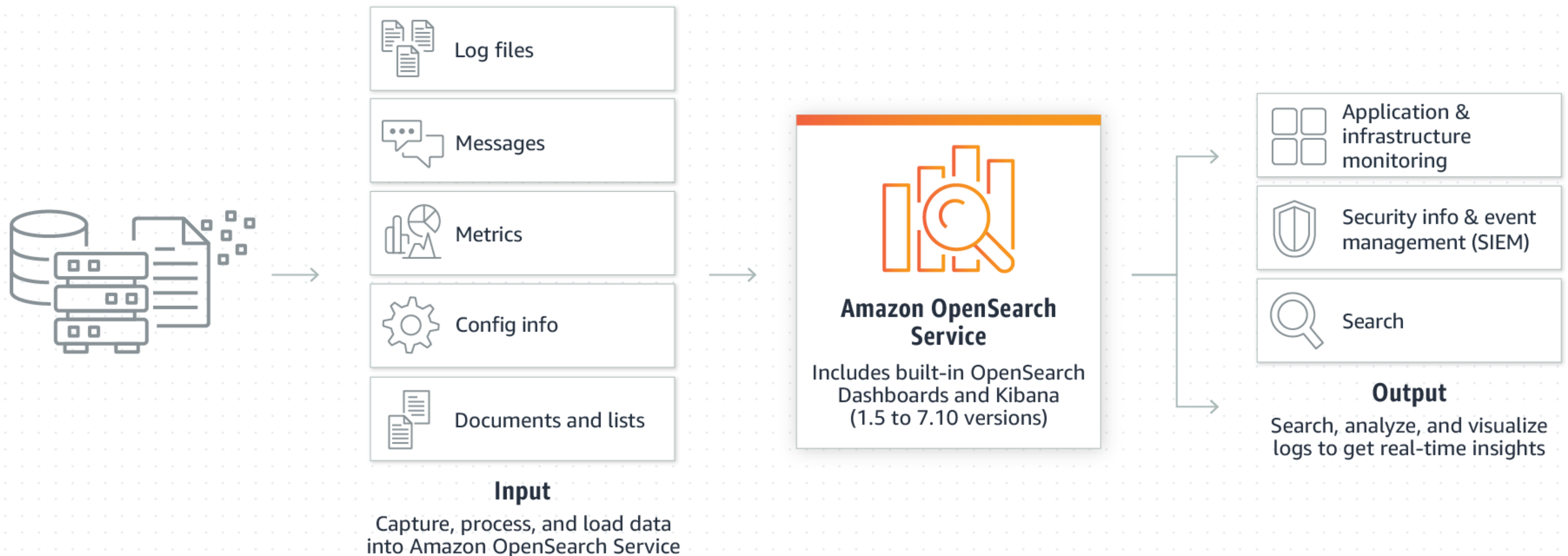


```
1 // Parse a CSV string of songs and return the list (position, originalChartDate, artist, title).
2 // Ignore lines starting with #.
3 function parseCSV(csvString) {
4   const songs = [];
5   const lines = csvString.split('\n');
6   for (let i = 0; i < lines.length; i++) {
7     const line = lines[i];
8     if (line.startsWith('#')) continue;
9     const [position, originalChartDate, artist, title] = line.split(',');
10    songs.push({
11      position: parseInt(position),
12      originalChartDate,
13      artist,
14      title
15    });
16  }
17  return songs;
18 }
19
20
21
22
```

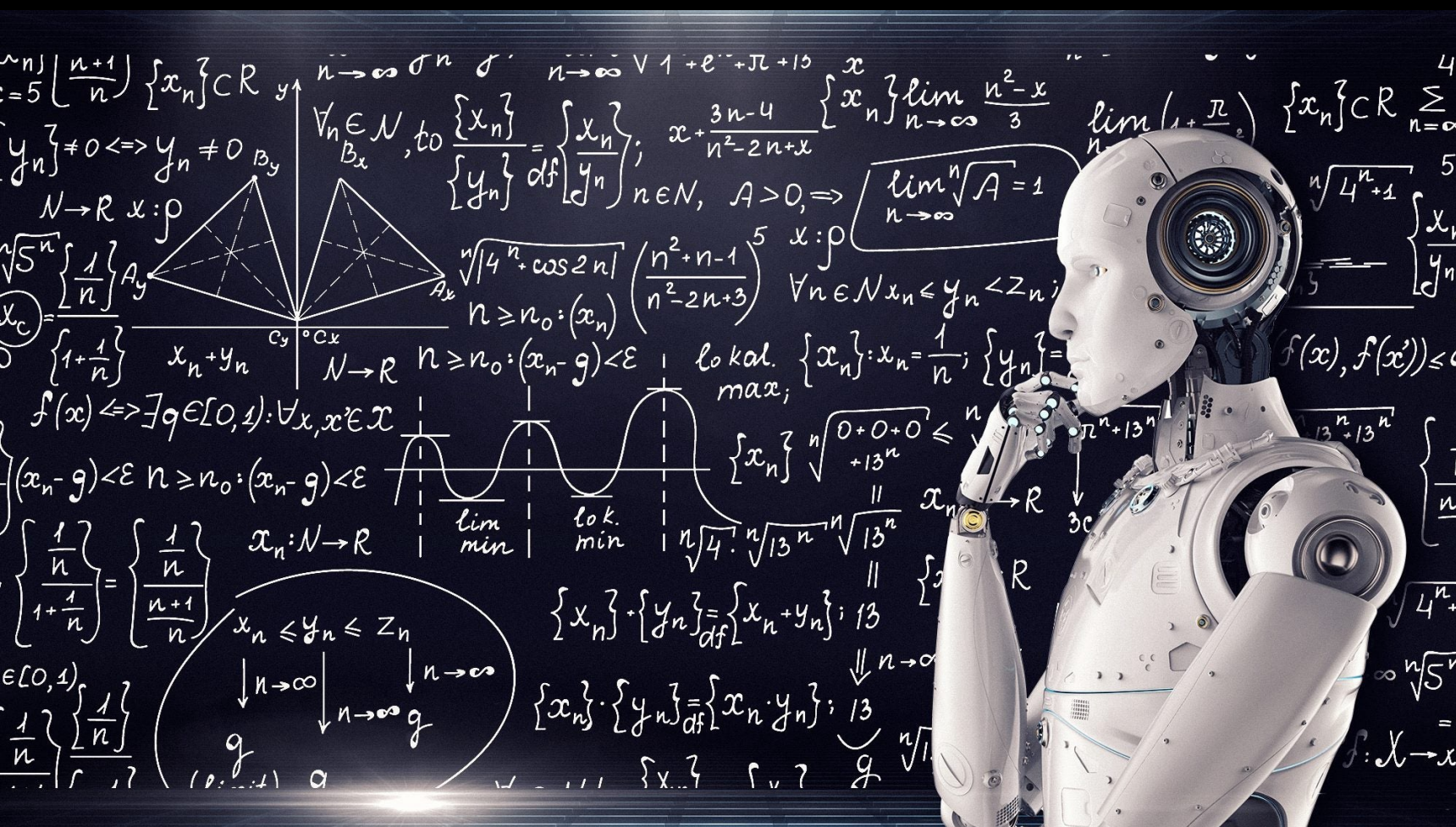
Amazon CodeWhisperer

Open Search Service

Perform interactive log analytics, real-time application monitoring, website search, and more.



<https://aws.amazon.com/opensearch-service/>



- GenerativeAI (Bedrock)
- AI for good
- Lab

GenAI for American Sign Language



Generative AI Application To Produce American Sign Language Avatar

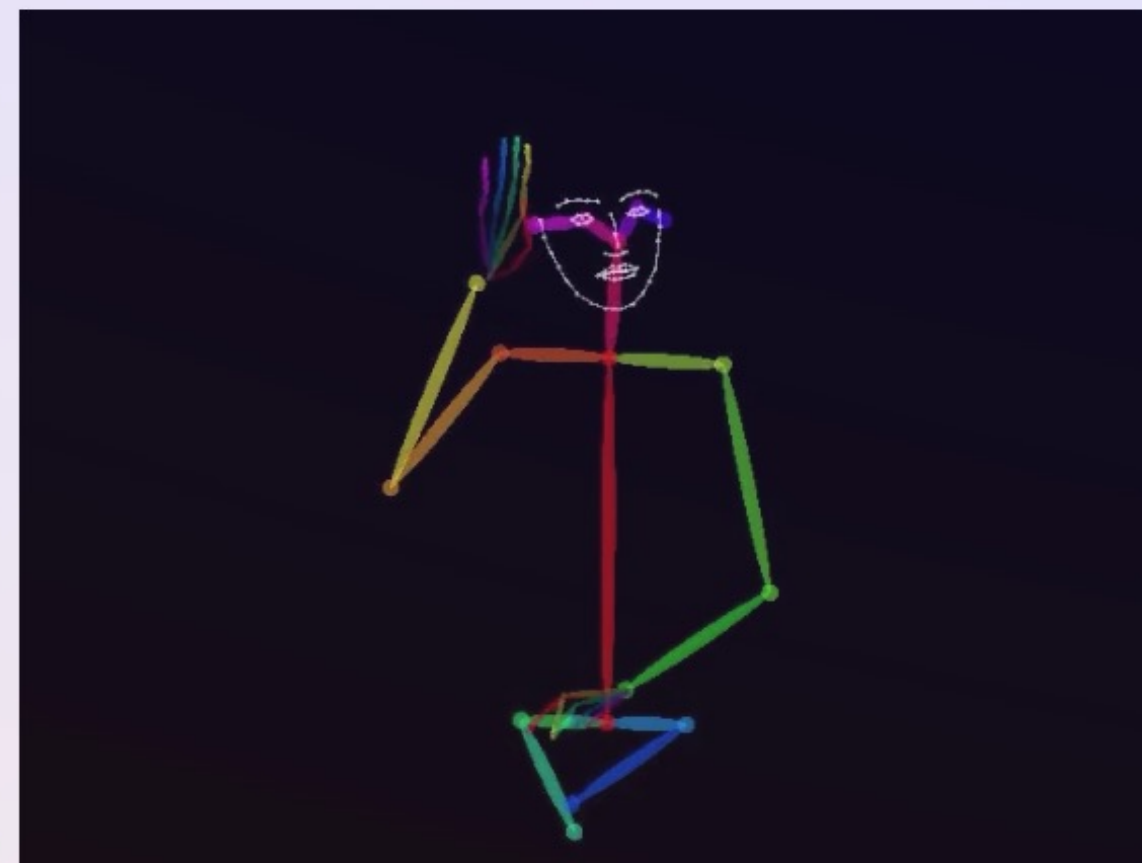
English

hello, how are you?

14/500



Avatar



American Sign Language



<https://www.genaslavatars.com/>

Lab

Prompt Engineering

(Ping to register)

Text Classification

Named Entity Recognition (Zero-Shot)

Extract the name and mailing address from this email:

Dear Kaylee,
It was great to talk to you at the seminar. I thought Jane's talk was quite good.

Thank you for the book. Here's my address 2111 Ash Lane,
Boulder, CO 80301

Best,
Marilú

Name: Marilú

Mailing Address: 2111 Ash Lane, Boulder, CO 80301

.....

.....

.....

Resources

<https://aws.amazon.com/events/events-content/>

<https://reinvent.awsevents.com/on-demand>

<https://github.com/iportilla/amazon-bedrock-workshop>