

# **CLOUD AND SERVERLESS COMPUTING PROJECT**

## **Text to Speech by Using Amazon Polly**

AWS Polly is a cloud service provided by Amazon Web Services that enables developers to easily convert text into lifelike speech using deep learning technologies. Here is some detailed information about AWS Polly:

1. **Text-to-Speech Conversion**: AWS Polly allows developers to convert text into natural-sounding speech in multiple languages and voices. It supports a wide range of languages and accents, making it suitable for global applications.
2. **Customization**: Developers can customize the speech output by selecting different voices, adjusting speech rate, volume, and pitch. This allows for creating personalized and engaging voice experiences for users.
3. **SSML Support**: AWS Polly supports Speech Synthesis Markup Language (SSML), which provides fine-grained control over speech output. Developers can use SSML tags to add pauses, emphasis, and other effects to the speech.
4. **Integration**: AWS Polly can be easily integrated into various applications and services through APIs. Developers can use SDKs for popular programming languages like Python, Java, and JavaScript to interact with Polly.
5. **Scalability**: AWS Polly is a fully managed service that scales automatically based on demand. Developers do not need to worry about provisioning resources or managing infrastructure, making it easy to handle varying workloads.
6. **Pricing**: AWS Polly offers a pay-as-you-go pricing model based on the number of characters converted into speech. There are different pricing tiers for different regions and voices, allowing developers to choose the most costeffective option.
7. **Use Cases**: AWS Polly can be used for a variety of applications, including voiceenabled interfaces, interactive voice response systems, e-learning platforms, audiobook creation, and more. It is particularly useful for adding speech capabilities to applications that require natural language interactions.

Overall, AWS Polly provides a powerful and flexible solution for text-to-speech conversion, enabling developers to create engaging voice experiences with minimal effort.

The screenshot shows the Amazon Polly page in the AWS Management Console. The browser tabs include 'ki lms - Yahoo India Search Res...', 'Course CLOUD AND SERVER...', 'ki erp - Yahoo India Search Res...', 'KI ERP', and 'Amazon Polly | us-east-1'. The address bar shows 'us-east-1.console.aws.amazon.com/polly/home?region=us-east-1#'. The AWS logo and 'Services' link are in the top left. The main heading is 'Machine Learning' followed by 'Amazon Polly' and the subheading 'Turn text into lifelike speech using deep learning'. A paragraph describes Amazon Polly as a service that turns text into lifelike speech. To the right, a 'Get started with Amazon Polly' box contains the text 'Explore high-quality spoken output with dozens of lifelike voices across a broad set of languages.' and a 'Try Polly' button. Below this, a 'Pricing' box states 'With Amazon Polly, you only pay for what you use. You are charged based on the number of characters of text that you convert either to speech or to Speech Marks metadata.' and includes a link to 'Amazon Polly Pricing'. At the bottom, a 'Getting started and documentation' box has a 'Getting started' link. The footer of the console shows '© 2024, Amazon Web Services, Inc. or its affiliates.' and links for 'Privacy', 'Terms', and 'Cookie preferences'. The Windows taskbar at the bottom shows the date '28-03-2024' and time '09:37'.

Machine Learning

## Amazon Polly

### Turn text into lifelike speech using deep learning

Amazon Polly is a service that turns text into lifelike speech, enabling you to create applications that talk and build entirely new categories of speech-enabled products. Amazon Polly is a Text-to-Speech (TTS) service that uses advanced deep learning technologies to synthesize speech that sounds like a human voice.

**Get started with Amazon Polly**

Explore high-quality spoken output with dozens of lifelike voices across a broad set of languages.

[Try Polly](#)

**How it works**

Amazon Polly's Text-to-Speech (TTS) service turns text into lifelike speech using advanced deep learning technologies. With dozens of lifelike voices across a broad set of languages, you can build speech-enabled applications that work in many different countries. The latest Polly Long-Form engine is tailored to synthesize expressive speech that captivates listeners. It's suitable for longer content such as news articles, marketing content, training videos and more. The Polly neural Text-to-Speech (NTTS) voices deliver advanced improvements in speech quality through a machine learning approach. In addition, Amazon Polly Brand Voice can create custom voice(s) tailored for your organization. This is a custom engagement where you will work with the Amazon Polly team to build an NTTS voice for the exclusive use of your organization.

**Pricing**

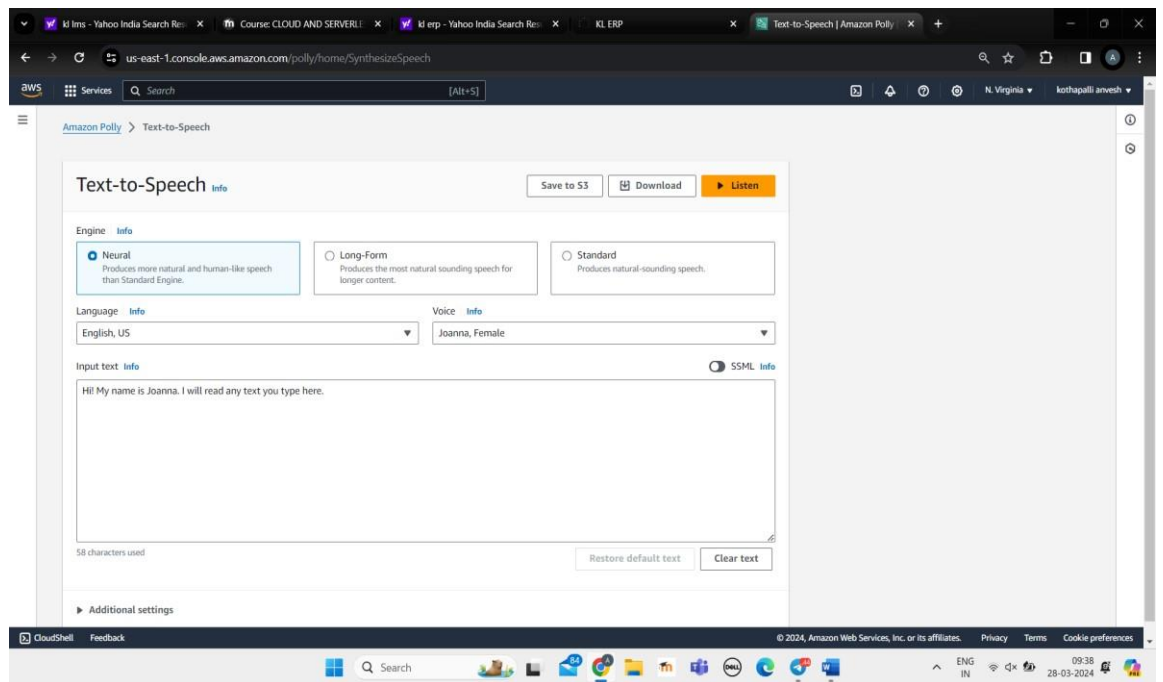
With Amazon Polly, you only pay for what you use. You are charged based on the number of characters of text that you convert either to speech or to Speech Marks metadata.

[Amazon Polly Pricing](#)

**Getting started and documentation**

[Getting started](#)

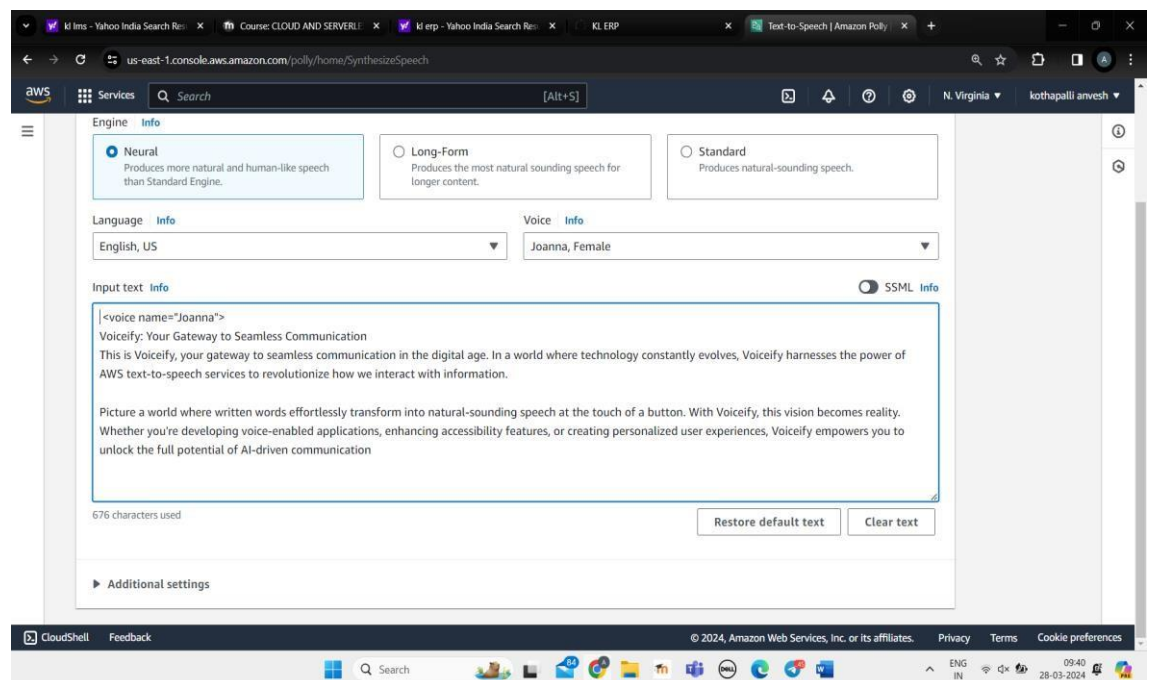
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The screenshot shows the Amazon Polly Text-to-Speech console in a web browser. The URL is `us-east-1.console.aws.amazon.com/polly/home/SynthesizeSpeech`. The console displays the following settings:

- Engine:** Neural (selected), Long-Form, Standard.
- Language:** English, US.
- Voice:** Joanna, Female.
- Input text:** Hi! My name is Joanna. I will read any text you type here.
- SSML:** Off.
- Characters used:** 58.

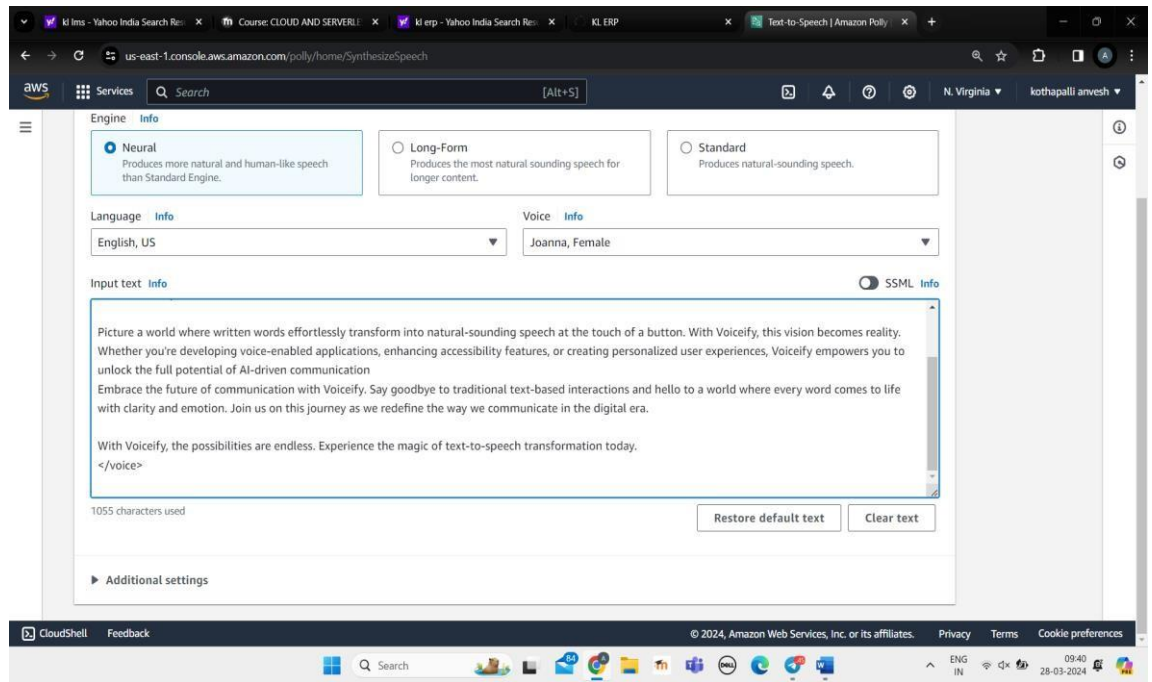
Buttons for "Save to S3", "Download", and "Listen" are visible at the top. The bottom of the console shows "Additional settings" and a "Feedback" link.



The screenshot shows the Amazon Polly Text-to-Speech console in a web browser. The URL is `us-east-1.console.aws.amazon.com/polly/home/SynthesizeSpeech`. The console displays the following settings:

- Engine:** Neural (selected), Long-Form, Standard.
- Language:** English, US.
- Voice:** Joanna, Female.
- Input text:** `<voice name="Joanna">`  
Voiceify: Your Gateway to Seamless Communication  
This is Voiceify, your gateway to seamless communication in the digital age. In a world where technology constantly evolves, Voiceify harnesses the power of AWS text-to-speech services to revolutionize how we interact with information.  
  
Picture a world where written words effortlessly transform into natural-sounding speech at the touch of a button. With Voiceify, this vision becomes reality. Whether you're developing voice-enabled applications, enhancing accessibility features, or creating personalized user experiences, Voiceify empowers you to unlock the full potential of AI-driven communication.
- SSML:** On.
- Characters used:** 676.

Buttons for "Restore default text" and "Clear text" are visible at the bottom of the input text area. The bottom of the console shows "Additional settings" and a "Feedback" link.



## Input Text:

<voice name="Joanna">

Voiceify: Your Gateway to Seamless Communication

This is Voiceify, your gateway to seamless communication in the digital age. In a world where technology constantly evolves, Voiceify harnesses the power of AWS text-to-speech services to revolutionize how we interact with information.

Picture a world where written words effortlessly transform into natural-sounding speech at the touch of a button. With Voiceify, this vision becomes reality. Whether you're developing voice-enabled applications, enhancing accessibility features, or creating personalized user experiences, Voiceify empowers you to unlock the full potential of AI-driven communication.

Embrace the future of communication with Voiceify. Say goodbye to traditional text-based interactions and hello to a

world where every word comes to life with clarity and emotion. Join us on this journey as we redefine the way we communicate in the digital era.

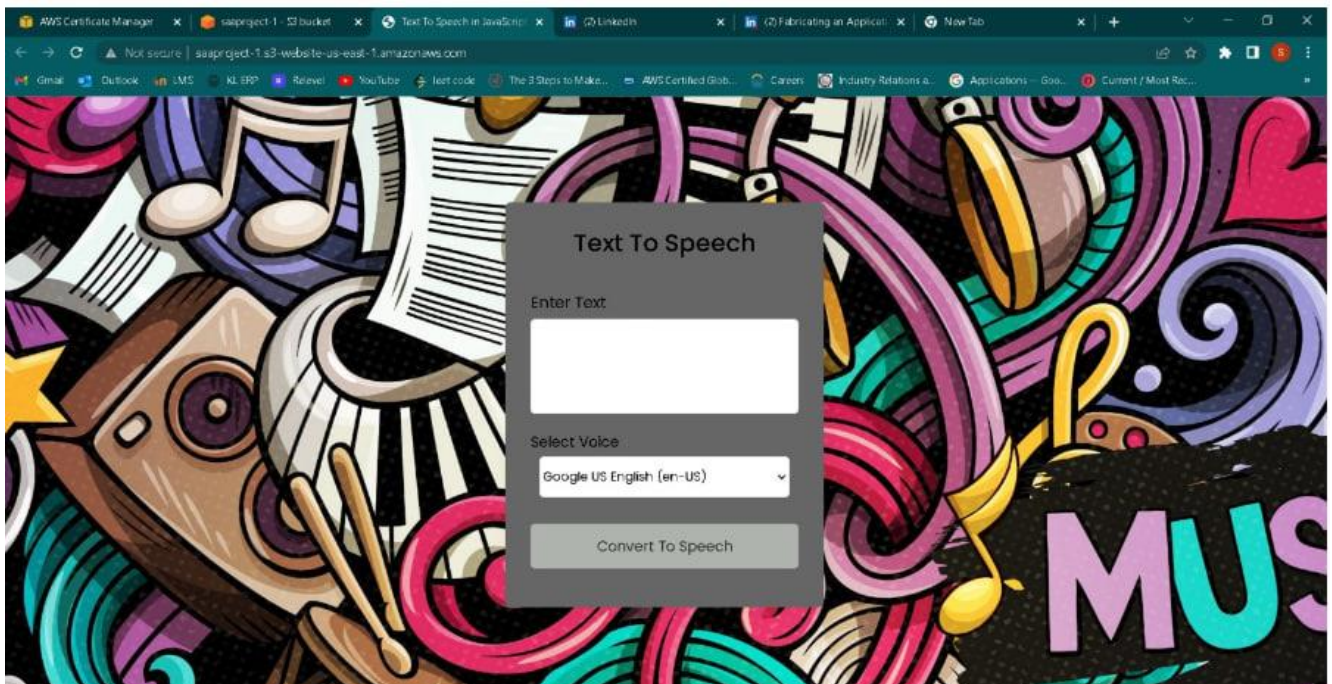
With Voiceify, the possibilities are endless. Experience the magic of text-to-speech transformation today.

</voice>

## Output Speech:



speech\_2024031505  
1533710.mp3



## Linked in article:

<https://www.linkedin.com/pulse/text-speech-using-amazon-polly-kothapalli-anvesh-vbvoc>