

Fórum da Internet no Brasil 2018

Algoritmos de aprendizado e acessibilidade: melhorar a vida e ampliar direitos

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unorthographic life One day however a small line of blind text by the name of Lorem Ipsum decided to leave for the far World of Grammar. The Big Copy advised her not to do so, because there were thousands of bad Copies, with Question Marks and obvious Semtex, but the Little Blind Text didn't listen. She packed her seven versalia, put her initial into the bag and made herself on the way.

When she reached the first hills of the Italic Mountains, she had a last view back on the skyline of her hometown Bookmarksgrove, the headline of Alphabet Village and the subline of her own road, the Line Lane. Pityful a rethoric question ran over her cheek, then she continued her way. On her way she met a copy. The copy wanted the Little Blind Text, that where it came from it would have been rewritten a thousand times and everything that was left from its origin would be the word "and" and the Little Blind Text should turn around and return to its own, safe country. But nothing the copy said could convince her and so it didn't take long until a few insidious Copy Writers ambushed her, made her drunk with Long and Prolate and dragged her into their agency, where they abused her for their projects again and again. And if she hasn't been rewritten, then they are still using her. Far far away, behind the word mountains, far from the countries Vokalia and Consonantia, there live the blind texts. Separated they live in Bookmarksgrove right at the coast of the Semantics, a large language ocean. A small river named Duden flows by their place and supplies it with the necessary regalia. It is a paradisiatic country, in which roasted parts of sentences fly into your mouth. Even the all-powerful Fulling has no control about the blind texts it is an almost unorthographic life One day however a small line of blind text by the name of Lorem Ipsum decided to leave for the far World of Grammar. The Big Copy advised her not to do so, because there were thousands of bad Copies, with Question Marks and obvious Semtex, but the Little Blind Text didn't listen. She packed her seven versalia, put her initial into the bag and made herself on the way. When she reached the first hills of the Italic Mountains, she had a last view back on the skyline of her hometown Bookmarksgrove, the headline of Alphabet Village and the subline of her own road, the Line Lane. Pityful a rethoric question ran over her cheek, then she continued her way. On her way she met a copy. The copy wanted the Little Blind Text, that where it came from it would have been rewritten a thousand times and everything that was left from its origin would be the word "and" and the Little Blind Text should turn around and return to its own, safe country. But nothing the copy said could convince her and so it didn't take long until a few insidious Copy Writers ambushed her, made her drunk with Long and Prolate, she dragged her into their agency, where they abused her for their projects again and again. And if she hasn't been rewritten, then they are still using her.

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**O que é aprendizado
de máquina?**

**Como o
aprendizado de máquina
pode contribuir com a
acessibilidade?**

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Exemplos...

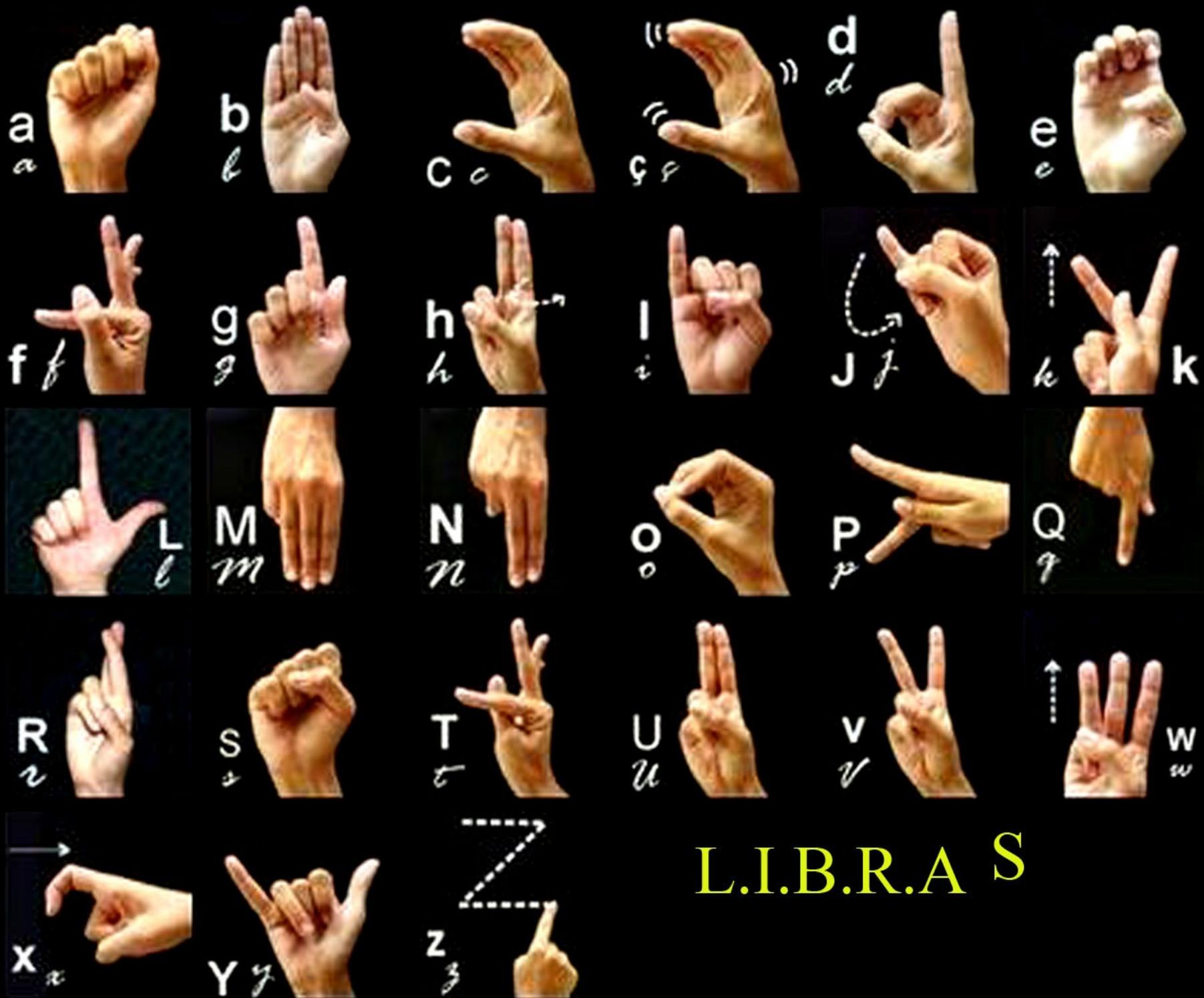
A maioria das pessoas que ouvem não entende a linguagem de sinais.

Syed Ahmed,

assistente de pesquisa no **Rochester Institute of Technology**, em 2017, utilizou sistemas de visão computacional, aprendizado de máquina e sistemas embarcados para transformar a linguagem de sinais americana em palavras que podem ser lidas em uma tela de vídeo.



“Bridging this gap means a hearing person can interview a deaf person, or someone who is hard of hearing, via Skype or Google Hangout,” Ahmed said. “They can hold a meeting or do job interview, and just communicate in a natural way.”



... algoritmos de visão computacional e de **aprendizagem de máquina** podem, automaticamente, converter **não somente** sons em texto, mas também pode converter os vídeos com linguagem de sinais em texto, sendo um grande benefício para a comunicação das pessoas surdas ou com perda auditiva.

What is Cloud Vision API ?

Ready to use Machine Learning models



Cloud
Translate API



Cloud
Vision API



Cloud
Speech API



Stay tuned...

A Cloud Vision API fornece recursos avançados de análise de imagens.

A Interface de Programação Cloud Vision permite que os desenvolvedores de aplicativos criem a próxima geração de aplicativos que podem ver e entender o conteúdo das imagens.

How to use: Vision API



Google Cloud Platform

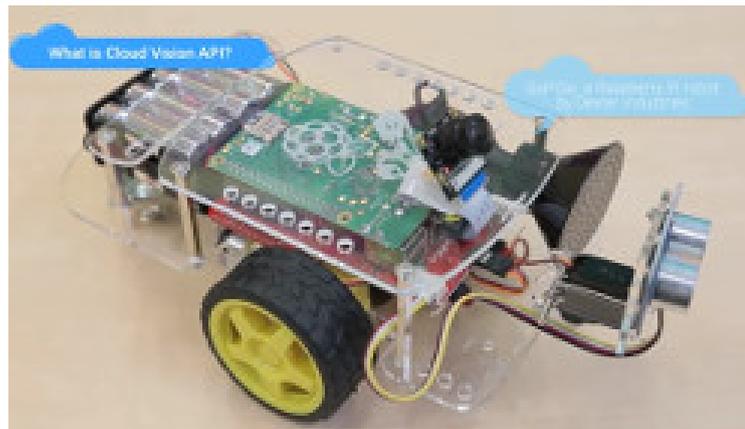
How entity detection works?

```
"description": "automobile"  
"mid": "/m/0jyfg",  
"score": 0.97065437
```



Cloud Platform

The Cloud Vision API will evolve over time as new concepts are introduced. For example, Google plans to support integration with Google Cloud Storage. One early beta tester was [Aerosense](#), a professional fixed-wing drone developed by Sony and ZMP.



GoPiGo (left) and testing the Cloud Vision API's emotion recognition capabilities
(click images to enlarge)

The Raspberry Pi robot demo application consists of a “few hundred” lines of Python code that calls the Vision API, says Google. The YouTube video below shows the wheeled GoPiGo bot running the demo, but it’s said to work with any Raspberry Pi based robot. The demo enables a robot to identify objects and basic emotions as it rolls about. You can even teach the robot to follow a face.

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Intelligent Machines



An Algorithm Summarizes Lengthy Text Surprisingly Well

Training software to accurately sum up information in documents could have great impact in many fields, such as medicine, law, and scientific research.

by Will Knight May 12, 2017

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O futuro será bem melhor?

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... depende

**As tecnologias preditivas,
de aprendizagem de máquina e
de AI dependem de uma grande
captura e manipulação de
dados...**

Os segmentos mais frágeis da sociedade não podem melhorar sua mobilidade e ações perdendo seus direitos e privacidade...

**... precisamos
pensar especificamente como
regular dispositivos, sistemas e
algoritmos de acessibilidade.**

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... tecnologias para autonomia.

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