Smarter technology for all

Al-Powered Human-like Avatar for Sign Language

Daniel Rezende | July 10th, 2025

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Sign Language

Visual-spatial language that considers the **movement of the hands**, **body**, and **facial expressions** to produce signals that are captured through **vision**

- Not universal
- Struggle reading written languages
- Translation is different from Interpretation



Voice2Sign

Solution

- Brazil: 2.3+ million people are deaf or hard of hearing
- World:
 - 450+ million people are deaf or hard of hearing
 - Around 70 million people communicate using sign language

Problem

Main challenges faced by the deaf people:

- Lack of accessible communication options
- In-person and digital environments often lack sign language interpretation
- Audiovisual content rarely includes sign language interpretation
- Deaf users prefer not to interact with virtual or non-human avatars

Solution

Enables hearing users to input phrases in Portuguese (via audio or text) and instantly interprets them into Brazilian Sign Language (Libras) using a Generative Human-like Avatar

Extra Features:

- Add new signs to expand the vocabulary of the Generative Avatar
- Download the generated videos
- Choose the Avatar appearance miming a real person

Voice2Sign is a solution that focus on a hearing to deaf communication

Timeline

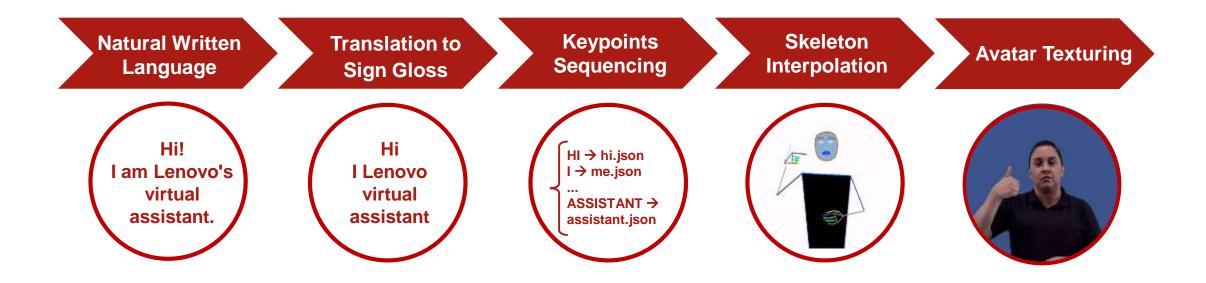


Field research Proof of Concepts Papers / Patents Libras Translation Al Tool **Generative Human-like Ava** Prototype MVP

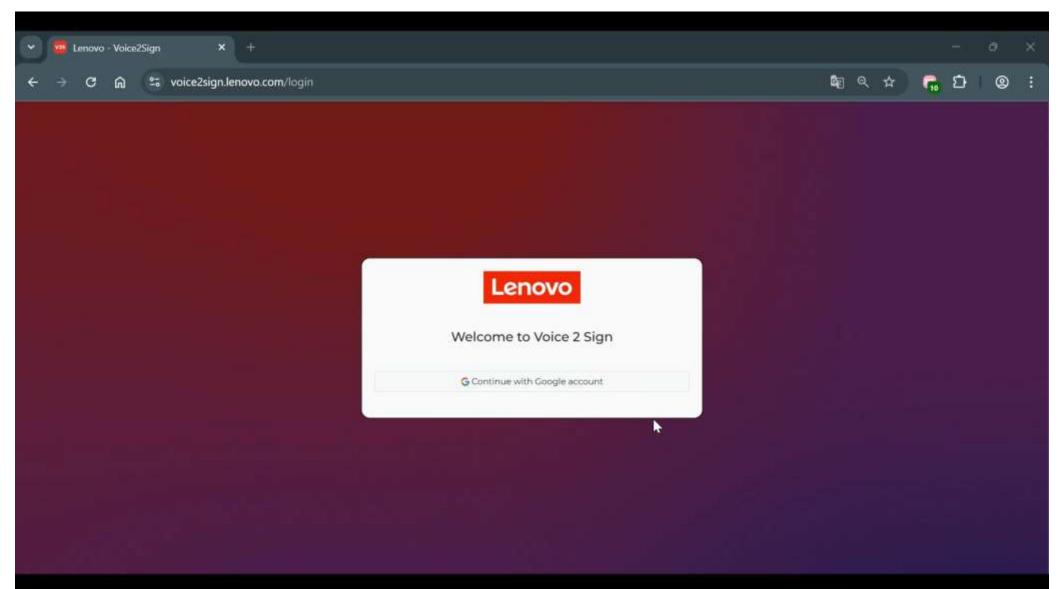
Internationalization Common Engine for Multiple Sign Languages

Human-like Avatar Generation

Patented



Voice2Sign





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