

**Problem owner name**

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**Problem title**

Translate sign language in real-time

**What is the problem you want to solve?**

Inability to communicate over video using sign language

**Why do you want to solve this problem?**

We want to enable deaf people to communicate with anyone over video. Currently, someone who is deaf can only access basic text chat to communicate online. This interface is limiting, and further, in the group-call scenario, someone who can only communicate using sign language may feel left out of the group conversation. Providing first-class support for sign language in video calls would empower every individual to have a more natural and meaningful video chat experience.

**What do you envision as the ideal solution for this problem?**

An application that can translate any natural sign language to text in real-time over video.

**What sort of Open Source solution do you think can be created in 48 hours, by a small team of developers, designers and data analysts?**

An application that can translate signs from the American Manual Alphabet (or similar) to text in real-time, allowing the user to “spell” words letter-by-letter.

**What are the current solutions for handling this problem?**

Currently, deaf people can only communicate using text (i.e. using a keyboard). Companies like MotionSavvy have done impressive work in the space, but in general, solutions to this problem are in their infancy.

**Summary for website (up to ~ 1 page)****PROBLEM**

The advent of real-time video chat has enabled people to communicate naturally regardless of their location. One group of people, however, have not experienced quite the same level of empowerment. People who can only communicate using sign language are limited to text chat when they need to communicate remotely, a medium with clear limitations. Perhaps most importantly, with the growing adoption of telehealth, deaf people need to be able to communicate naturally with health practitioners, regardless of whether the practitioner knows sign language.

**SOLUTION**

Imagine a world where people could naturally communicate using sign language to anyone over video. At an essential level, the ideal solution would be able to translate a given video stream of a

person speaking in sign language into text for the other participant/s. Of course, the problem also presents many usability challenges.

### **CURRENT SOLUTION**

Solutions in this space are very limited. MotionSavvy is perhaps the most promising solution in the space - they have demonstrated that it is indeed possible to translate video of sign language into text in (close-to) real-time. The next step in the evolution of such a technology would be integrations into video chat platforms - this step is yet to be realised.