

Technical Disclosure Commons

Defensive Publications Series

May 2021

Signaling for Signing for the Deaf and Hard of Hearing

Defensive Publication

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

Publication, Defensive, "Signaling for Signing for the Deaf and Hard of Hearing", Technical Disclosure Commons, (May 24, 2021)

https://www.tdcommons.org/dpubs_series/4312



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

5/20/2021

Signaling for Signing for the Deaf and Hard of Hearing

Sony Group Corporation

Inventors:

Adam Goldberg

Brant Candelore

Robert Blanchard

SonyDP@oinkanalytics.com

Signaling for Signing for the Deaf and Hard of Hearing

SYP337171

ABSTRACT

The invention defines mechanisms and fields that describe the sign-language carried or embedded in a video stream. The invention related to describing a video asset as having the "signing language" of "American Sign Language" or "British Sign Language", etc.. Generally, only audio or captions have a language - not video. Discoverable attributes will allow the user interface to announce availability and configurability of the service to the viewer.

BACKGROUND

Regarding languages, the standard description of languages, IETF BCP47, has mechanisms to describe the language (e.g., "ase" - American Sign Language, "bfi" - British Sign Language), as of the writing of this publication, we are unaware of any standardized way to associate a signing language with a video.

The need for this invention may not be clear to many, as signing is infrequent (except in certain cases), and when signing is provided there aren't often choices of sign language, and many people (esp. non-signers) don't understand that, e.g., American Sign Language is very different from British Sign Language, even though they both may be associated with spoken English language.

DESCRIPTION

The invention defines mechanisms and fields that describe the sign-language carried or embedded in a video stream.

We claim:

- 1) Describing a video asset as having the "signing language" of "American Sign Language" or "British Sign Language", etc.. Generally, only audio or captions have a language - not video. With discoverable attributes allows the user interface to announce availability and configurability of the service to the viewer.
- 2) Describing the size/location of the person signing.
- 3) Describing the size/location of the person talking's head or lips (in order in order to help someone lip read).
- 4) Describing the delivery of emotional intent of the signing, lip reading, and closed captioning that might not be apparent to people that are profoundly hard of hearing or completely deaf. See Invocations dealing with displaying emotion information with closed captioning and with signing.
- 5) Signaling the signing delivered as separate video stream with the intended to be mixed on top of the main video stream possibly replacing an existing person signing with a different signing language. We can claim customization/preferences of the signing presentation, size, color, highlighting, and position of the overlay.
- 6) Customization/preferences when there is signing (turn the sound volume up/down/off when there is signing or lip reading, turn captions off when there is signing or lip reading ...)

For 1) to 6) these attributes can be used to automatically present the video with sign language and other information (e.g. emotional intent), via user selected preferences (see separate disclosures for application of the metadata for those automatic uses).