

Continuous Sign Language recognition for the design of a gestural server

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How to represent a sign as a vector?

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- 543 pose keypoints obtained from MediaPipe
- Reduced to 28 components with PCA while keeping more than 99% of the information

How to represent a word as a vector?

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- Word2Vec model
- Fasttext and Fauconnier (1.6 french words)

How to represent a signed sentence as a vector?

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- Sequences of maximum 256 frames (256x28 float matrix)
- Sequences of maximum 24 words (24x200 float matrix)

Perspectives

- Keeping on building a transformer based baseline
- Precise definition of needed data