

Recognising Sign Language Handshapes from Video and Electromyographic Signals Project nr 2 Liesbet De Vos, Martin Colot, Yasmine Akaichi







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Summer Workshop 25' London







Project aim and motivation

Aim: Explore the use of video and Electromyographic (EMG) signals for sign language handshape recognition





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- EMG offers potential for wearable, real-time HCI and could help improve performance over video-only models





Methodology

1. Data Collection: collect video + EMG data on sign language handshapes from multiple participants.



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2. Develop baseline (video-only) model: How well does a video-only model perform on handshape recognition?



neuro-symbolic architecture





Methodology



3. Develop EMG model: Can we improve the baseline video-based recognition model using muscle signals?



Why join our project?

- If you are interested in ...
- Computer Vision
- Gesture Recognition
- Natural Language Processing
- Neuro-Symbolic Al
- Sign Language
- EMG Data Collection and Processing

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Thank you for your attention !







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