A comparison of common classifier models for hand pose estimation for the New Zealand Sign Language alphabet

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| *ABSTRACT:* |

KEYWORDS: NZSL; MediaPipe Hands; Pose estimation

# Introduction

Acronym HOLM

We cant do motion easily (next steps)

I have compared several models

Accuracy is good.

Overfitting?

Flow:

Motivation for sign translation

Lack of NZ context

Classification of the problem (translating sign in general)

Possible methodologies/ approaches

* CNN on hands
* Landmark detector into hand pose detector
* Landmark detector into rules based check and match
* Line space to detect fingers and CNN
  + Find references of these attempts

Limitations and next steps:

* Overlapping hands and strong occlusion (media pipe issues)
* The rest of HOLM, movement or body position/ inclusion of pose, and facial expression