REAL-TIME HAND GUESTURE RECOGNITION

How to use human-machine interactions for recognizing hand gesture patterns using finger segmentation?

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1 Context

There has been lot of research done to help the people who are deaf and dumb. With the advancement of technology in the deep learning and computer vision area, hand gesture recognitions can be used to facilitate communication between people who knows sign languages and who doesn't know the sign languages at all.

2 Criteria for success

Applying convolutional neural networks and experimenting on various scenarios will be the key to get higher accuracy in matching hand gestures.

3 Scope of solution space

The model can be used for classifying some outcomes through hand gestures, but is not suitable for classifying lots of different outcomes.

4 Constraints within solution space

Arriving at possibilities of classifying many outcomes with the model is out of scope with the current solution.

5 Stakeholders to provide key insight

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6 Key data sources

Self-clicked images of hand layouts at different angles and positions will be used

H D E I P

Steps involved in solving the problem

- Creating a dataset with self clicked images of hand layout at different angles and positions
- Training a CNN on the captured dataset
- Predicting the hand gesture