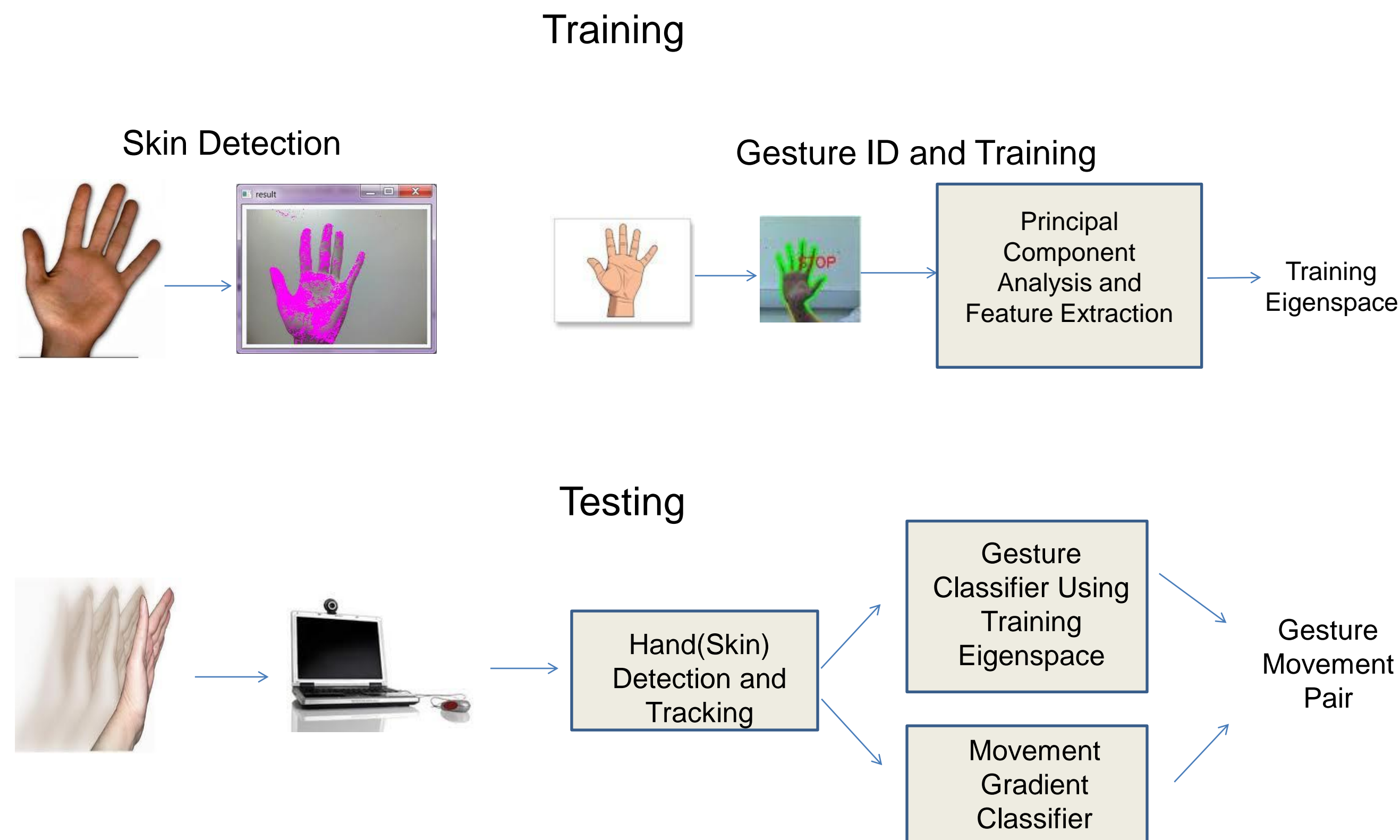


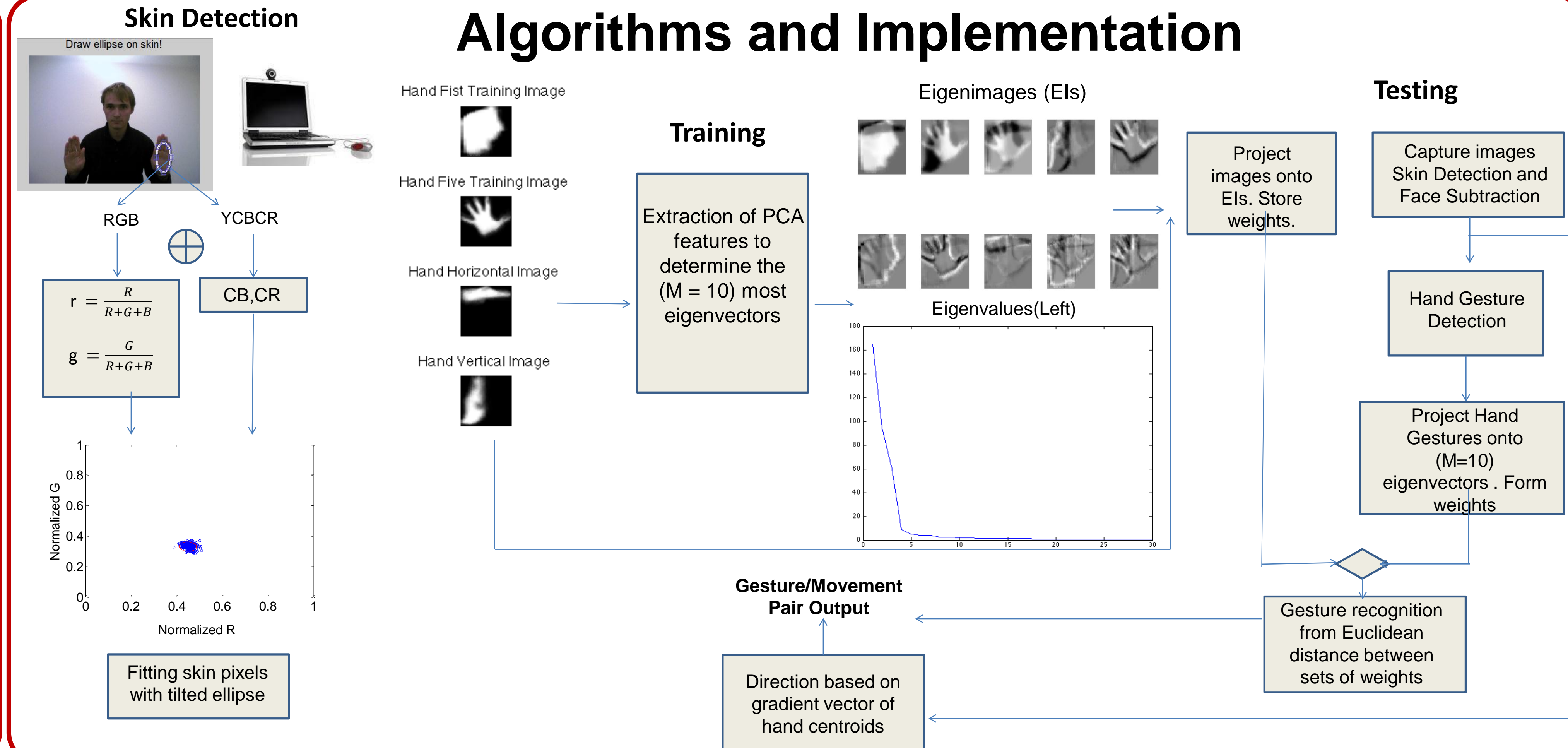
Hand Sign Recognition Based on Palm Gesture and Movement

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Gesture-Movement Recognition System Design



Algorithms and Implementation



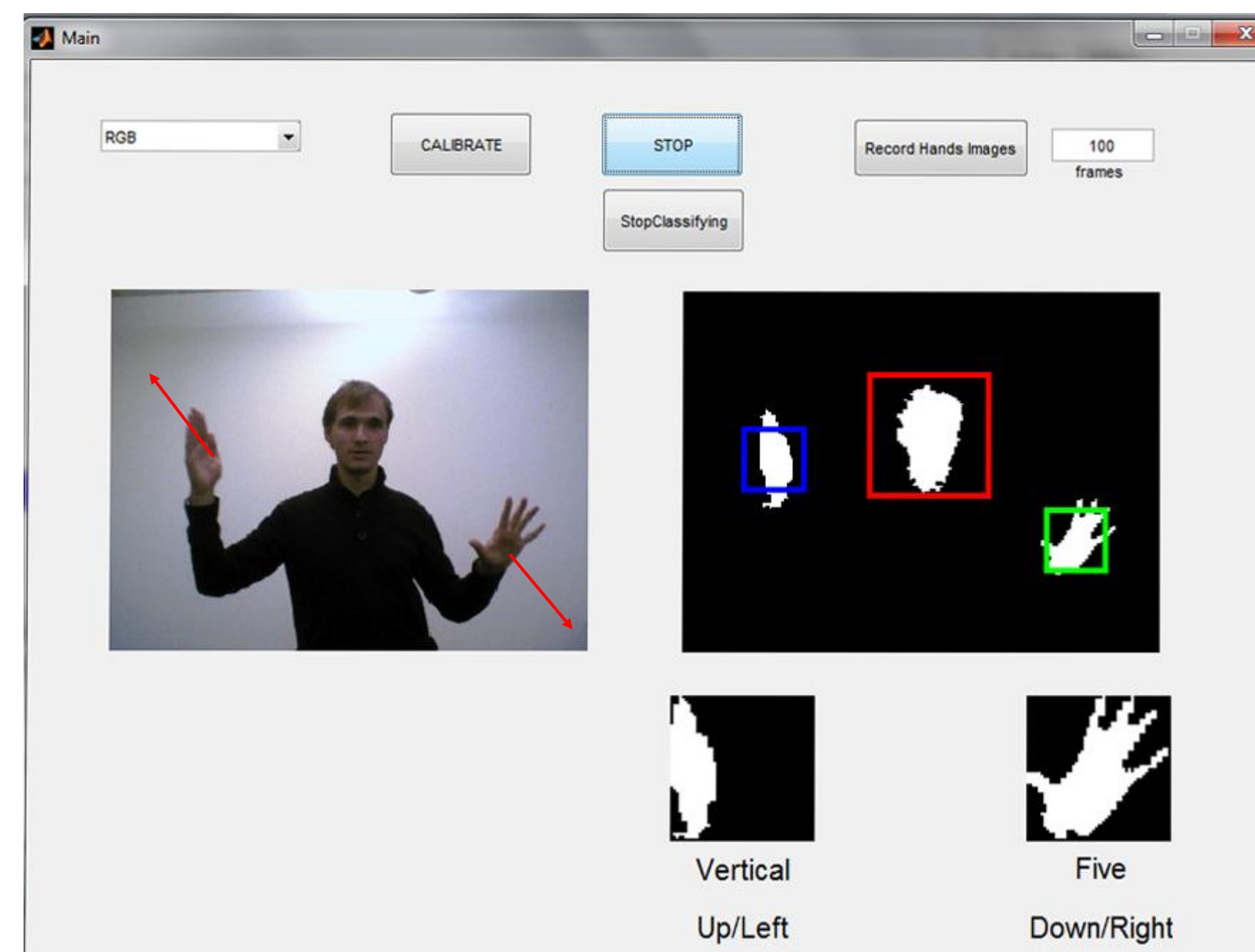
Applications of Gesture Recognition



So Why Movement Tracking?

- Number of gestures that can be reliably detected (especially with non-uniform lighting conditions) is limited.
- If hand movement can be tracked simultaneously with the gesture, more granular recognition and tracking can be achieved.

Results



- Real-time application for robust gesture and movement detection.
- Can be trained to track any type of gesture and movement with an increased number of combinations
- Currently recognizes 32^2 possibilities for gesture-movement-pairs (for both hands).
- Possible extensions include incorporation of complex non-linear movements of hands
- Classification of a succession of movements (such as a squiggle)