

# FingerSense

Intuitive single-handed interactions analysis using bio-acoustic signal

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## Motivation

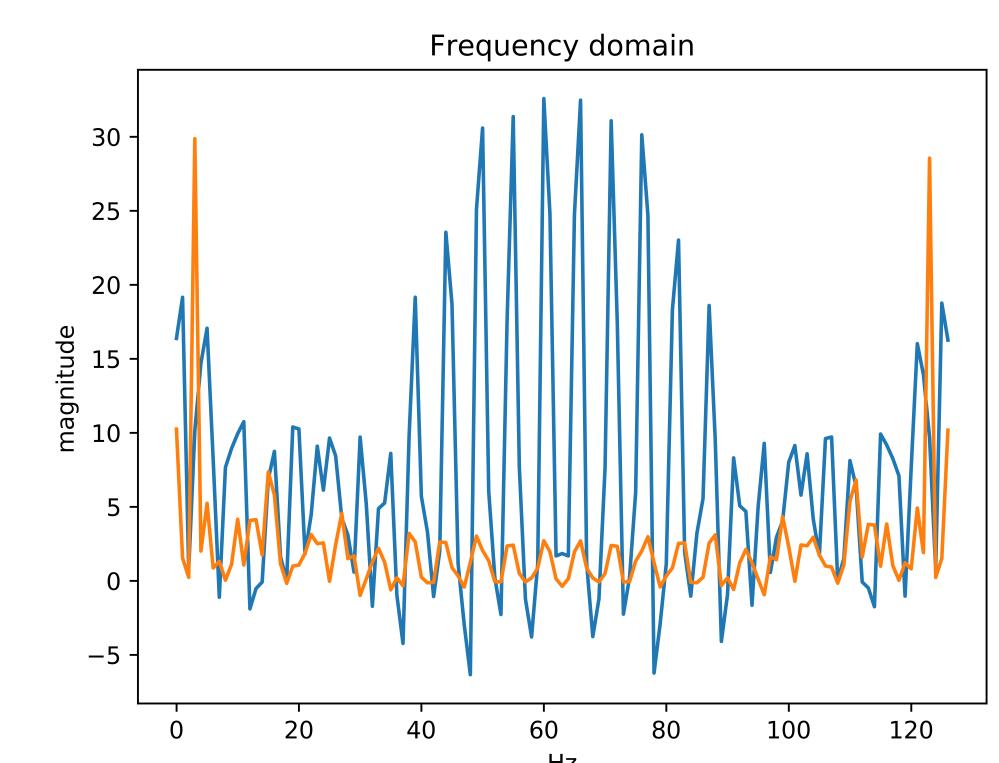
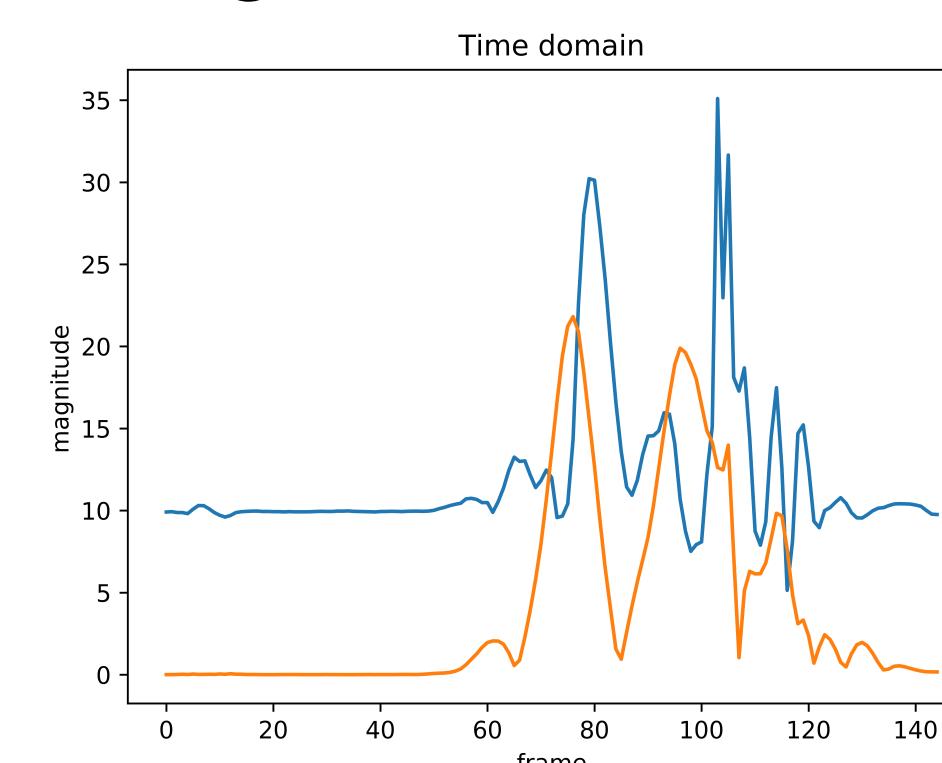
Explore the limitation on single-handed interaction by commercial smart watches



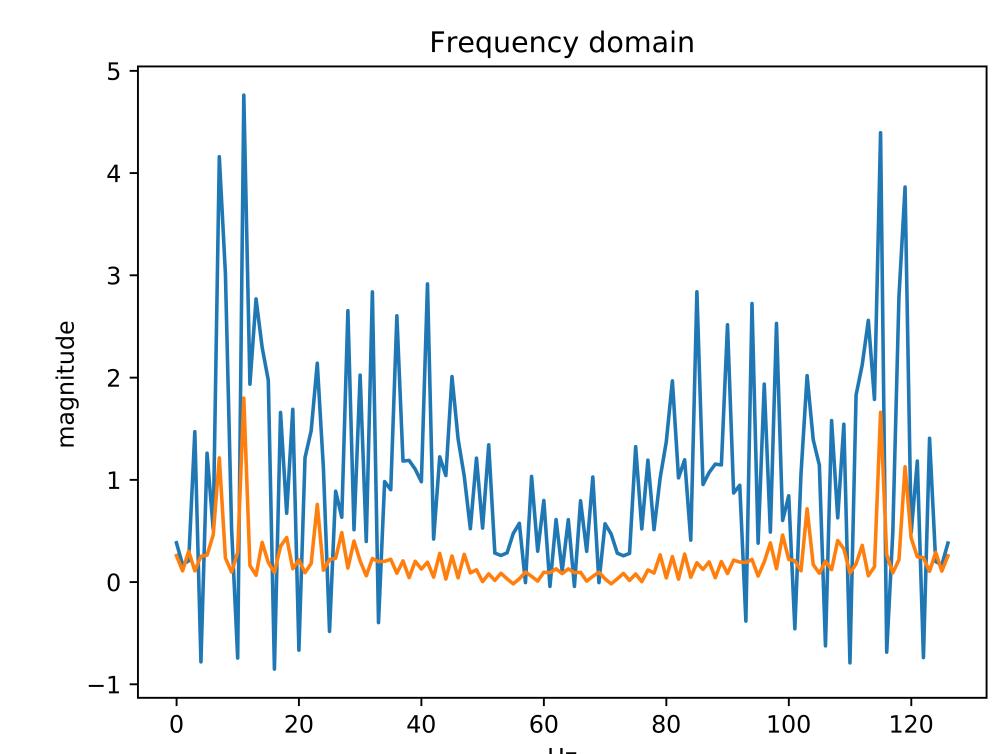
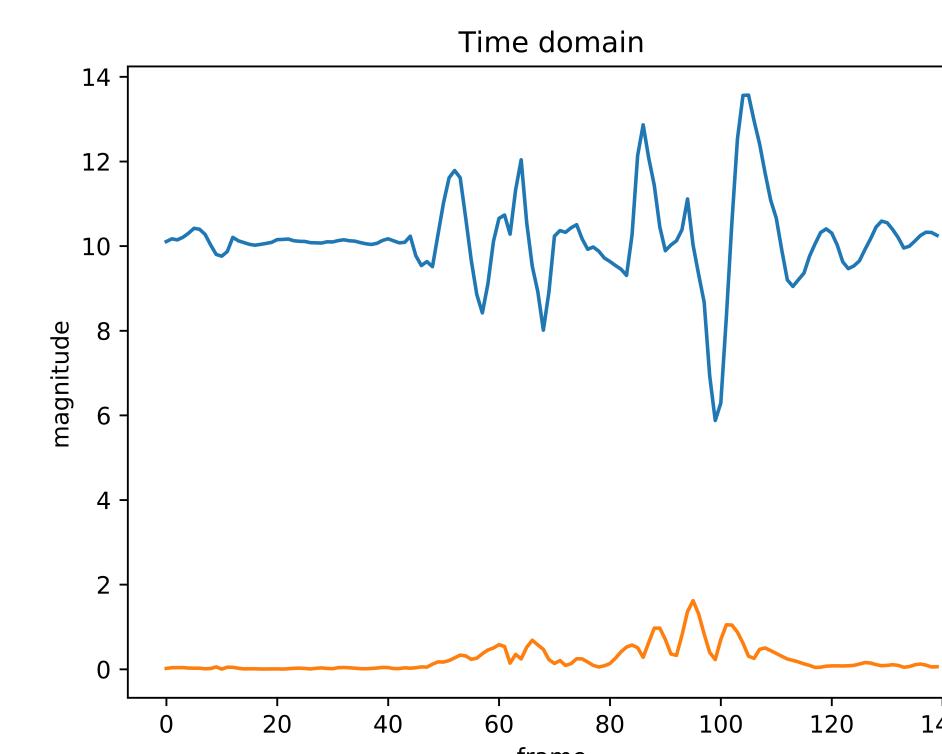
## STEP 4:

After that, we will extract the bio-signal of the gestures tester made in previous step, and use machine learning techniques to classify signals recognizing different gestures

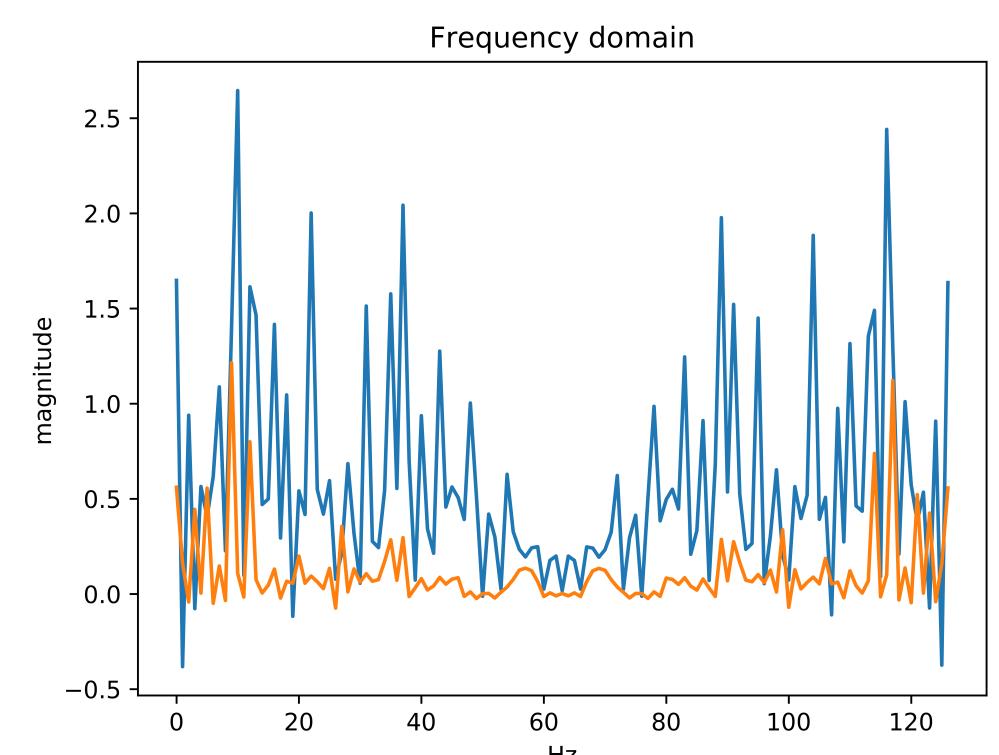
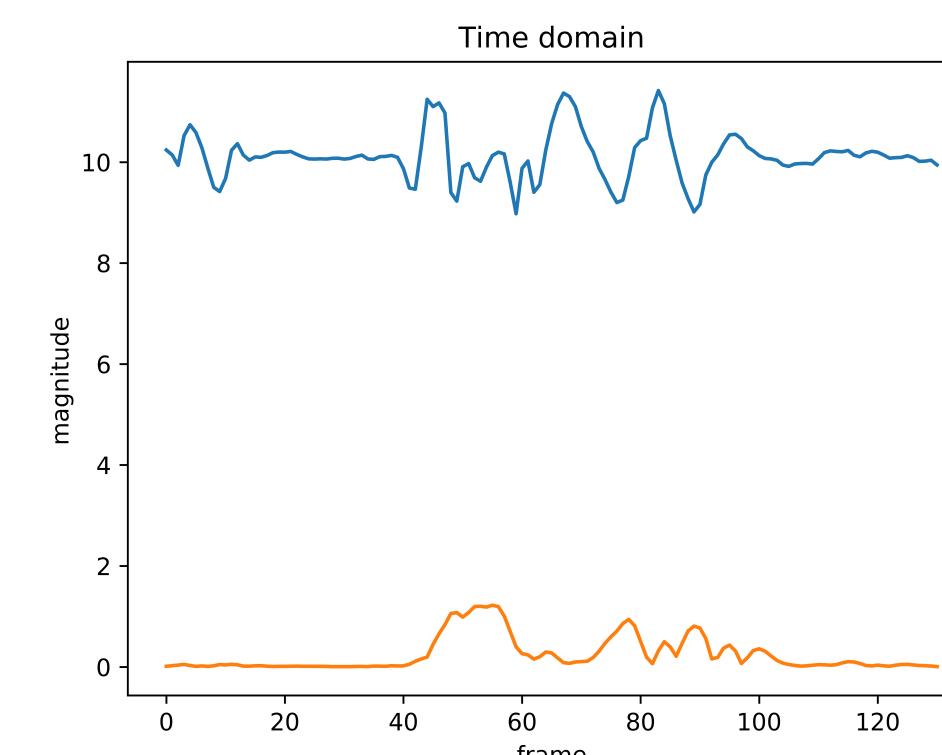
### Shaking:



### Clenching:

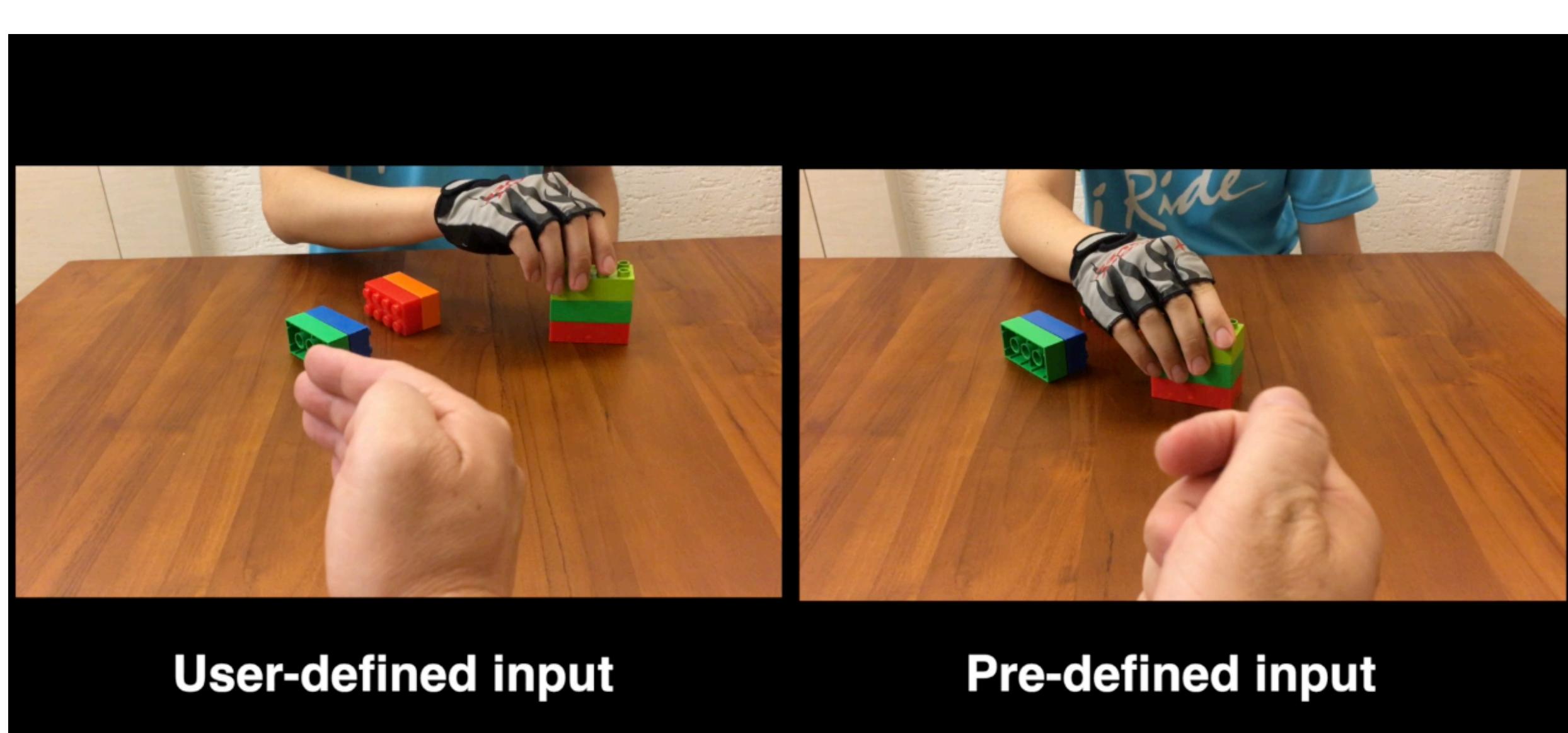


### Flicking:



## STEP 5:

By the trained model, we detect which gestures set can be accurate to a level to be applied on different area like AR/MR



**STEP 3:**  
Ask tester to do some interactions task wearing the smart watch

## Contribution

- Explore the single-handed gesture set
- No special-made devices needed
- Identify the gestures from user by machine learning techniques on bio-acoustic signal

# Exploration

# Single-handed Gesture

# Wearable

# Machine learning

# 2017S Advanced HCI Class