

# Gesture Recognition

## Version 2.0

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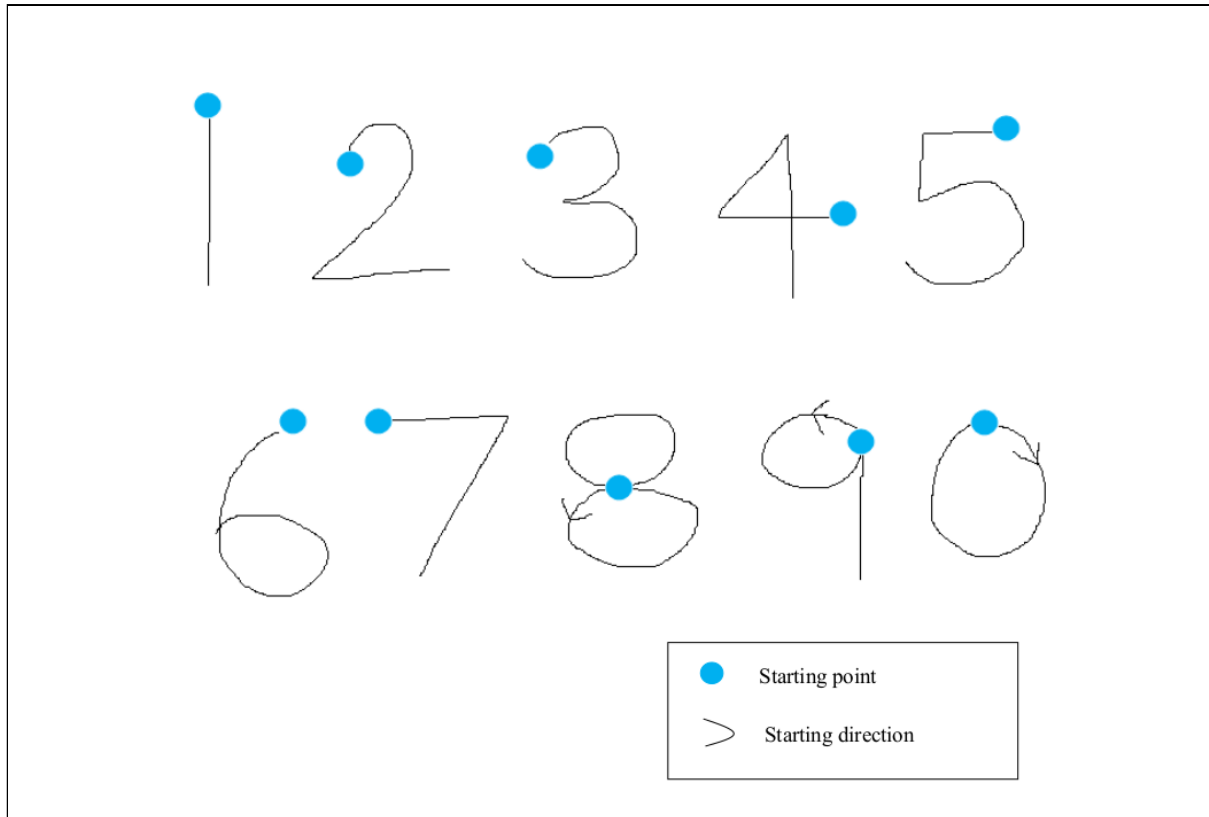
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## 1 Overview

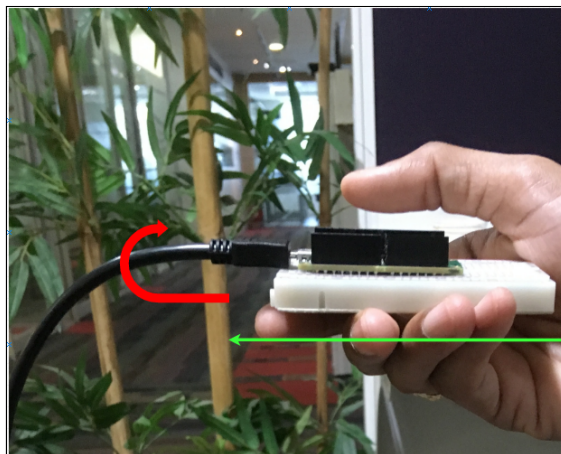
Hand gesture recognition system to recognize the digits (0 to 9) using tri-axial accelerometer mounted on QueSSence ARM Cortex M4 Platform. We use KNN classifier API for identification of digits and uses the DTW distance as similarity measuring technique. The system consists of four phases: data acquisition, data preprocessing, Feature generation, and Classification. It is trained with hand gestures of digits by various persons and validated the recognition.

## 2 Trajectories of ten digits

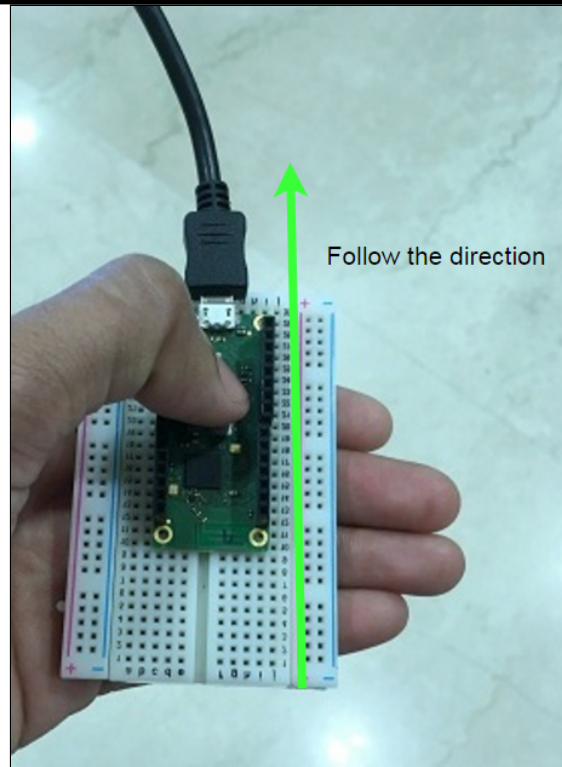


### Instructions

- Give the gesture as mentioned in the chart and follow directions.
- After pressing the button, gesture has to be given without delay or keeping idle.
- While drawing the gesture, make sure sensor is not tilted in any direction.



- Hold the sensor device as shown below i.e. USB pin is pointed to outwards of person.



- Maintain some speed while giving the gesture.
- After finishing the gesture, press button without delay