

Interaction Technology and Techniques

Assignment 8: Gesture Recognition with the \$1 Recognizer

Summer semester 2014

Submission due: Sunday, June 29th, 2014, 23:55

Hand in in groups of max. two.

Your task is to implement a gesture recognizer.

8: Gesture Recognition with the \$1 Recognizer

Write a small Python application `gestures.py` that takes a Bluetooth MAC address as its only parameter. This application should implement the "One Dollar Gesture Recognizer" using the Wiimote as a 2D pointing device and have the following features:

- detect at least three different predefined shapes (e.g. circle, square, ...)
- gesture data is recorded while pressing the "A" button and analyzed on release
- possible to learn new shapes/create new templates by using the "B" button while recording
- display raw data and templates as graph + a text label indicating the recognized gesture

Some hints:

- use `wiipoints2d.py` as starting point
- document your code - add a block comment at the beginning which briefly describes the operation of your activity recognition system

Hand in the following file:

gestures.py: a Python script that implements the \$1 Recognizer.

Points

- **1** The python script has been submitted, is not empty, and does not print out error messages.
- **2** The script correctly implements the features above.
- **2** The script accurately detects 3 different gestures.
- **1** The script is well documented.
- **1** The script is well-structured and follows the Python style guide (PEP 8).

Submission

Submit via GRIPS until the deadline

All files should use UTF-8 encoding and Unix line breaks. Python files should use spaces instead of tabs.

Have Fun!