Gesture Recognition

1st Given Name Surname

dept. name of organization (of Aff.)
name of organization (of Aff.)
City, Country
email address or ORCID if applicable

Abstract—Give a short summary of your project, the gestures that you looked at, and summarise your results. Do not write more than 50 words.

*CRITICAL: Do Not Use Symbols, Special Characters, Footnotes, or Math in Paper Title or Abstract.

Index Terms—Gesture recognition

I. INTRODUCTION

What have you been doing? What did you learn? Have you been successful?

Write at most 6 pages, including references and figures.

II. DATA CAPTURING

Explain your method of capturing data.

What gestures did you choose? The gestures shall include waving (both left to right) and polishing (clockwise and counterclockwise), and one gesture of your choice. Explain how each gesture has been performed.

How many samples did you use for each gesture? Did you vary the way you performed the gesture?

III. FILTERING

Did you filter the data. If so, what filters did you use? What were the parameters? Provide evidence that it improved the performance.

IV. QUANTIZATION

Did you use a fixed quantisation (using a fixed set of vectors) or did you use k-Means to calculate vectors.

How many did you choose? Why did you choose this number? Did you add more vectors to the set?

V. DIMENSIONALITY REDUCTION

Explain how you reduced the size of the samples? Did you resample using decimation? Did you apply a spectral method? How did you choose? Why did you select the method?

VI. HIDDEN MARKOV MODEL

Explain how you trained the model.

VII. EVALUATION

Explain the evaluation. How well does it work?

For each gesture, capture at least five fresh samples that were not used for training. Capture gestures that should not be detected.

Do you see:

- true positives (is the training data detected correctly)? Is new data detected cortrectly?
- false positives (gestures that should not be detected)?
- false negatives (gestures that should be detected are not)?
- true negatives (gestures that should not be detected are not)?

ACKNOWLEDGMENT

List all your peers that have contributed to this report or the work reported in here.

REFERENCES

Cite all resources that you have used.