**INTERIM DEMO MARKING FORM (20 marks == 10%)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | **Topic** | | | **Score** | **Maximum score** |
| Training | Preprocessing | | | |  | 1 |
| Data Augmentation | | | |  | 1 |
| Feature Extraction | | Raw pixels | | 1 | 1 |
| Gabor | | 1 | 1 |
| Others | | 1 (Hog), 1 (PCA) | +1 |
| Classification | | NN | | 1 | 1 |
| K-NN | | 1 | 1 |
| SVM | | 1 | 1 |
| Other | |  | +1 |
| Parameter Tuning | | | | 1.5 | 2 |
| Testing | Training/testing separation | | Cross Validation | |  | +2 |
| Performance Evaluation | | Recognition Rate | | 1 | 1 |
| Type I-II errors | | 1 | +1 |
| Analysis and reflection | | | | 3 | 4 |
| Detector | Selection from previous phase | | | |  | 1 |
| Sliding Window | | | Hor/Ver Scan |  | 2 |
| Multi scale |  | +1 |
| NMS | | | |  | +2 |
| Evaluation | | | Rates |  | 1 |
| Reflection |  | 2 |
|  | **Total** | | | | 13.5 | 20 |

**Comments**

*Strong Points*

Nice systematic approach to combine features and classifiers and good use of tables

Use of other metrics such as precision and recall

Parameters were quiet systematically varied

*Weak Points*

You could also use PCA with the other features

*Suggestions going forwar*

Focus next on starting the implementation of the detector multiple scales, NMS, etc…. Evaluate this quantitatively.

Then revisit the combinations you have done (and see if you can add some more if time allows) and do a good analysis and quantitative numbers using multiple metrics. Validate empirically their parameters (some like the K in K-NN was little varied) and create graphs of their importance. Cross validation could be used as better experimental setup.

Be sure of translating your number to a good analysis nad justification in the report.