

# CMP9780M Applied Signal and Image Processing

## 2024/2025 Report Template

### 1. Image Processing

#### 1.1 Introduction

Write 1-page introductory section regarding the state-of-the art techniques employed for emotion classification through face processing. You may wish to report existing dataset, pre-processing techniques, and analysis methods. Provide a critical reflection of the strengths and limitations of your techniques as well as the hypotheses that drive you to adopt a specific methodology. Please include relevant references within the References Section.

#### 1.2 Methodology

Write 1.5-page description of the final image dataset you used, its specific characteristics, information about the processing pipeline you choose, the toolboxes/functions that you employ in the analysis. Each processing step should be analysed in a separate sub-section.

#### 1.3 Results

Please provide sufficient evidence about the results you produced by 1) reporting them, 2) producing the available illustrations where applicable and c) evaluation metrics through confusion matrices, precision/recall, or ROC curves. This part contains your own analysis and is very important.

#### 1.4 Discussion

You should provide here a 1-page, critical reflection about the quality of your work and especially: 1) methodology robustness, 2) Evaluation of the classification performance, 3) identification of vulnerabilities/limitations and 4) Future work.

### 2. References

You put here the appropriate number of references that justify your actions within the context of this assessment. Please follow consistently a specific reference style. This section is in addition to the 5-pages length of the report.

### 3. Appendix

Screenshots, code snippets, or any other material referenced in the report text that is essential for the presentation of your work in this section but cannot be included in the report text for various reasons must be included. This section does not count against the report's 5-page maximum.