## COMP4061 (2019/20)

## Summative Assessment: L4 SSA – Advanced Computer Vision

| Student Identifier        | gkgf37 |
|---------------------------|--------|
| Overall Mark (out of 100) | 69     |

gkgf37.pdf official: gkgf37,69

| Assignment Deliverables | As Required | Observations / Comments  |
|-------------------------|-------------|--|
| Python script(s)        | Yes         | All code operates as specified with dataset / environment.     |
| Video example           | Yes         | video of very poor visual quality due to excessive compression |
| Interfaces to data set  | Yes         |  |
| Works with OpenCV 4.x   | Yes         |  |
| Observations            | •           |  |

Observations

Quite reasonable in terms of processing time per image.

| Marking Criteria   | Mark | Feedback   |
|--|------|--|
| Overall design and implementation of your solution including aspects of: (30%) | 20   | A good overall design that addresses all aspects of the task effectively with some additional aspects present.   |
| feature detection,<br>selection and Essential<br>matrix estimation             |      | A good and well designed approach which is supported but with little evidential support for the design choice made.  |
| effective re-use of existing open source software / components                 |      | Good, effective re-use of components with some consideration of broader implementational issues.   |
| ground truth for performance evaluation  |      | A good strategy apparent, supported by limited comparative evidence of performance against other alternative approaches.   |
| Comparative performance: with / without dynamic objects (30%)                  | 22   | Moderate overall performance comparison from which a valid conclusion is apparent.   |
| Report: discussion of approach/performance (8%)                                | 4    | A basic report that could be significantly improved in terms of formal scientific reporting style and content.   |
| <b>Report:</b> illustrative example of performance (7%)                        | 6    | Effective use of limited sub-sample of data to provide illustrative examples of work carried out.  |
| Clear, well documented and presented <b>program source code</b> : (5%)         | 3    | Moderated well structured and presented code would benefit from additional commenting, file header descriptor comments and the use of comment barriers to separate functions/sections in places. |
| Additional credit will be given for one or more of the following: (20%)        | 14   | Multiple aspects present and presented with varying aspects of comprehension and success (as per below).   |
| <ul> <li>comparison heuristics<br/>and/or feature filtering</li> </ul>         |      | Not present.   |
| - visualization of ground<br>truth data against VO<br>- visualization with     |      | Present – a reasonable approach is implemented with some supporting evidence of performance.   |
| overlay onto external mapping  |      | Present – a good approach is implemented with supporting evidence of performance.  |
|  |      |  |

**General Feedback:** 

A reasonable attempt that covers all of the key aspects of the task effectively with some deficiencies and areas for improvement present.

## To improve future work please consider:

Use comment barriers in your code to separate functions/headers within your code.

Use file header comments to describe functionality, authorship and usage of each source code file.

Presentation of report in a formal scientific writing style should include textual figure captions that are numerically referenced from the text.

Consider all task aspects, including use of statistical supporting evidence of performance (quantitative)

Presentation of report in a formal scientific writing style should include the correct formatting of URL references.

TPB ------ CV MT: 0.1 (L4, 2019/20)