COMP3381 (2018/19) - Summative Assessment: L3 Assignment – SSA – Computer Vision

Student Identifier	gkgf37
Overall Mark (out of 100)	62

Assignment Software Testing	**Working / Present (Y/N)**	**Observations / Comments**
Python script (working on specified reference system – CS labs)	Y	
Video example (as requested)	Y	
Interfaces to data set as specified	Y	
Works with OpenCV 3.x	Y	
General observations from the implementation: Operates as required, quite slow in terms of processing time per image.		

Assignment Marking	**Mark**	**Feedback**
Overall **design and implementation of your solution** including aspects of: • any image pre-filter/processing performed (or similar) • choice of object detection methodology (inc. search strategy) • effective integration of object range estimation from stereo vision (30%)	22	Effective use of HOG+SVM approach. Good use of image pre-processing and cropping. Innovative use of hybrid selective search + sliding window search strategy. Excellent use of aspect ratio, disparity distribution and distance thresholding based heuristics for improved detection. Disparity averaging for ranging.
General performance - object detection and distance ranging (30%)	20	Moderate overall detection and ranging performance for pedestrians. Notable FP and missed detections
Report: discussion / detail of solution design and choices made (5%)	4	A well presented report that could be mildly improved in terms formal scientific reporting style.
Report: statistical evidence of the success of system (5%)	0	None presented (for test TTBB… test data set).
Additional credit will be given for one or more of the following: • extension of object detection by object type • comparison of one or more detection methodologies • automatic adjustment from prelim analysis • the successful heuristics for efficiency or detection (for any of the above up to a maximum of 20%, dependent on quality)	8	Effective use of various heuristics to improve detection performance.
Clear, well documented program source code (10%)	8	Well structured code that would benefit from comment barriers to separate functions/sections + use of file headers + removal of unused functions/files/content.
General Feedback: A good 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 + use of file headers • use of statistical supporting evidence of performance • presentation of report in a formal scientific writing style should include: textual figure/table captions that are all numerically referenced and discussed from the text		