

Computing Science – Student Colloquium – Re-review of Manuscripts

Title of Manuscript: 2D keypoint detection and description

Paper id: Paper set 19

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Reviewer(s): Frans Simanjuntak

Please note that the paper you are reviewing is sent to you only for the purpose of this evaluation. The paper is to remain confidential until it is actually published in the conference proceedings. You should not pass it on or disclose it to anyone else. Delegation of the reviewing to someone else is not allowed.

Please indicate grade:

5 = excellent ("Definitely accept the paper w.r.t. this point")

4 = good ("I would argue for accepting the paper w.r.t. this point")

3 = neutral ("Not sure, could go either way the paper w.r.t. this point")

2 = bad ("I would argue against accepting the paper w.r.t. this point")

1 = completely unsatisfactory ("Definitely reject the paper w.r.t. this point")

General impression	grade	according to previous version:
Is the manuscript properly and coherently structured, and 'easy to navigate'? Are all of the required sections (including abstract, references etc.) present and well-positioned, and are subheadings well-chosen?	5	The manuscript is well structured and appropriately organized.
Is the manuscript clearly and concisely written in a proper tone of voice? (please mark sections, sentences, and phrases that are obscure, too complex, ambiguous, too wordy, too vague, that contain redundancies, or that appear to be irrelevant, and words or phrases that do not conform proper English idiom or scientific discourse) Does the document follow the prescribed style, does it give the necessary details in the references, does it generally maintain the proper form (give examples if not)?	4	In general, the paper is written clearly and concisely. However the punctuation is not used properly in some parts which makes the sentences sometimes ambiguous. For example in section 2.1 paragraph 2: "In general for this step one of the following three methods can be selected". Also there are some minor points in abstract as follows: - SURF is SIFT his potential successor and claims.... "his" should be removed and " and " should be changed to which. - Line 4 : KAZE appeared which all claimed to be better then , I think this is typo, should be changed to "than".
How would you assess the overall quality of the contribution offered in the manuscript in terms of innovativeness, originality, and independent thinking?	4	Both the summary of the existing works from the literature and the experiment for evaluation of repeatability of the considered key point descriptors are considered as contribution of good quality.

Framework (initial and final sections)	grade	according to previous version:
Do title and abstract properly cover the content and the argument of the entire manuscript (including results and discussion/conclusion)? (please mark deficiencies in title and abstract)	4	The title and the abstract cover the content and the argument of the entire manuscript.
Does the introduction cleverly introduce the topic and its importance? Do the authors briefly describe the current state of knowledge about this topic? Do they clearly state the approach they report, or the research problem they address, or the question they intend to answer in the paper, and its relevance? Do they give a brief overview of the entire document?	4	The introduction introduces the topic and its importance, describe the current state of knowledge, describe the approach, and give the overview of the entire document very well. However it doesn't mention the problem regarding 2D keypoint detection. While reviewing this paper, I was just guessing the problem based on the explanation of strawberries in section 2.1.
Does the concluding section (summary/conclusion/ discussion) actually address the approach/problem/question stated in the introduction? Do the authors clearly indicate the significance of their findings for the state of knowledge in the field? Do they assess their own approach to the problem? Do they suggest future directions or directions?	4	Both the discussion and the conclusion/future work sections are well structured and articulated.

Core sections of manuscript	grade	according to previous version:
Are the authors clear, complete, concise and coherent in their overview of the current state of knowledge regarding the topic addressed in the manuscript?	4	For the most part, the presented overview of the state of the art is of high quality.
Are the authors clear, complete, concise and coherent in their account of their own approach of the topic? Is this approach well-chosen?	4	The approach to the topic is appropriately chosen and presented
Have the authors provided sufficient methodological detail about their approach?	4	The involved methodologies are appropriately presented.

Have the authors been fair and explicit in their use and treatment of previous literature and the work of others (including visuals)? Are references in the text mentioned according to the criteria current in the field? Is the list of references complete and correct?	4	Well it depends. If figure 1 and 4 as well as table 1 and 2 are made by themselves, therefore it's not considered as plagiarism.
Have the authors made clever and proper use of illustrations?	5	In section 2.1 they use strawberries as an example in order to emphasize the usage of feature detector and descriptor.

Re-reviewing	grade	comment/suggestions
Has the paper improved in comparison with the first version? In what way?	5	The paper has significant improvement in comparison with the first version. It can be seen from the way the structured the paper by adding a new sub section in section 2 namely computer vision. This paper is also improved in terms of content. The authors completed the content of the missing parts such as abstract, algorithms, results, discussion, summary, and future work.
Did the authors meet your remarks on the first version?	4	Yes. They rephrased some sentences and added the missing parts such as abstract, explanations of algorithm, results, discussion, conclusion/summary, and future work.

Acceptance	
What is your overall grade for the paper?	5 = excellent, "Definitely accept the paper"
	4 = good, "I would argue for accepting the paper"
	3 = neutral, "Not sure, could go either way"
Should the paper be accepted for the studColl proceedings?	2 = bad, "I would argue against accepting the paper"
	1 = completely unsatisfactory, "Definitely reject the paper"
(encircle what is appropriate)	5 / 4 / 3 / 2 / 1

Further comments or suggestions
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This paper has significant improvement. The authors have added the content of the missing parts such as abstract, explanation of algorithms, results, discussion, summary/conclusion, and future work.

However, it has some some minor point such as the punctuation (particularly commas) is not used properly in several sections which makes the sentences ambiguous. Some sentences still point out to wrong table (section 4 paragraph 2 and section 5 paragraph 9). These sentences should be fixed in order to avoid confusion for the readers.

Moreover, I also tried to understand the algorithm in section 2.6. However, I was failed to understand it since it introduces some new keywords like LoG and DoG while in the paper itself the authors don't explain them.

In term of language, section 4, 5, and 6 are well presented over the other sections.