Computing Science – Student Colloquium – Review of Manuscripts

Title of Manuscript: Context Inconsistency Management in Pervasive Systems

Paper id: Set_09

Author(s): Samuel Esposito, Alexander Jurjens

Reviewer(s): Viktoriya Degeler

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	comment/suggestions
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	
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	Paper must be proofread for typos. There is something wrong with reference [3] (lots of extra authors). In 'Related work' authors incorrectly reference CoBrA and CORTEX. When mentioning systems described in other papers, the reference should be to the original paper that is dedicated to those systems, not to the other paper that also just mentions them in Related work section.
How would you assess the overall quality of the contribution offered in the manuscript in terms of	3	
innovativeness, originality, and independent thinking?		

Framework (initial and final sections)	grade	comment/suggestions
Do title and abstract properly cover the content and	5	
the argument of the entire manuscript (including		
results and discussion/conclusion)?		
(please mark deficiencies in title and abstract)		
Does the introduction cleverly introduce the topic	4	Motivation for the work is
and its importance?		barely mentioned in
Do the authors briefly describe the current state of		Introduction.
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?		
Does the concluding section (summary/conclusion/	5	
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?		

Core sections of manuscript	grade	comment/suggestions
Are the authors clear, complete, concise and coherent	4	
in their overview of the current state of knowledge		
regarding the topic addressed in the manuscript?		
Are the authors clear, complete, concise and coherent	2	Section 4 contains major
in their account of their own approach of the topic?		erroneous statements (see
Is this approach well-chosen?		further comments).
		Section 6 is nice, but
		requires deeper
		argumentation and
		explanations.
Have the authors provided sufficient methodological	3.5	Expanding section 6.1
detail about their approach?		would be very nice.
Have the authors been fair and explicit in their use and	4	
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?		
Have the authors made clever and proper use of	4	
illustrations?		

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

Further comments or suggestions

Section 4 contains major erroneous statements.

<<"Although the context model appears as a tree">> – a context model does not correspond to a tree structure. Even if you only count inheritance in the model, it would somehow recemble a tree, but multiple inheritance prevents it from being a proper tree. Other relations over entities in an ontological model have nothing in common with the tree at all.

Also, the nodes used in PCC described erroneously. <<"Now it [model] needs to be transformed into a CCT for PCC">>>. The inheritance relations authors are talking about are of different nature than nodes in a CCT (each such a node is a propositional clause). The first tree of figure 3 reads "For each entity that is a PLACE there exists an entity that is a ROAD" (which is not a correct constraint), and it has nothing to do with a student being in a place or on the road.

Though I liked the Section 6. This section represents the main ideas authors try to describe in the paper, their "own approach", thus this section is the main, most important section of the paper. Unfortunately, the section is written very consicely, "in a hurry", without deep explanations and argumentation.

I think the paper would benefit a lot if authors would try to go deeper in sections 6.1 and 6.2, while changing drastically section 4 to remove erroneous statements (maybe removing this section completely).

There is no real need to add an appendix. Why do authors need to add numbering to each line in appendix, if they never use it for referencing? Instead, it would be better to put this calculation in a paper itself, in section 6.1.