

Reviewer: 1

Originality : Below average

Quality : Weak

Relevance : Good

Presentation : Weak

Summary: This article presents an automated semantic web service composition method that aims to combine quality of semantic matchmaking and quality of service (QoS) at the same time.

Details: 1. In abstract, the authors stated that there are a few approaches concerning both quality of semantic matchmaking and QoS at the same time. Here are two recently published articles that handled this issue as described AND that the authors did not list in their references.

A. Optimization to Quality-of-Service-driven Web Service Composition using modified Genetic Algorithm, By Indresh Kumar Gupta, Jeetendra Kumar, Pradeep Rai, IEEE International Conference on Computer, Communication and Control (IC4-2015).

B. Combining Local Optimization and Enumeration for QoS-aware Web Service Composition, By Lianyong Qi, Ying Tang, Wanchun Dou, Jinjun Chen, IEEE 2010 IEEE International Conference on Web Services.

2. In equation 6, no information on the selection of  $w$ 's is provided. Without this information, the definition of the fitness function is nonsense.

3. Experimental results are totally self-satisfactory and no comparisons to other published methods is provided. The authors should use the results of the two articles given above to check the performance of their proposed method.

4. The authors must update their references with recently published articles. References are too old.

Candidate for the best paper award? : No

Reviewer: 2

Originality : Below average

Quality : Fair

Relevance : Weak

Presentation : Fair

Summary: The paper describes an evolutionary approach to service composition, fusing service match AND quality into a weighted sum of objectives to optimize. The approach is tested on the WSC09 corpus, without much comparative evaluation, and a few results are discussed.

Details: To say the truth, everything in this paper is straightforward and barely any novel insights or ideas are presented. It is not interesting to read and the results do not show any superiority worth a presentation at this prestigious conference.

It also appears that authors are not fully familiar with the used soft computing techniques. For example, it is often said "Evolution Computing" instead of Evolutionary Computation.

One may wonder why the problem at hand was not handled as multi-objective problems, where also a lot of metaheuristic/evolutionary approaches are well investigated, and also to see the trade-off between both aspects, semantic match and QoS better.

Also some doubts on relevance: QoS here is immediately seen as a set of target objectives. However, in communication science, QoS is also often understood as guarantees (guaranteed transmission rate, maximum delay time etc.). Satisficing is a common way of decision making, instead of optimizing.

Some specific comments:

- abstract, what was achieved at the end? Also add some quantitative results.

- discussion of reference [21]: " However, this solution does not consider distinguished matchmaking quality, which could lead to over-general outputs to be produced by selected services." - in addition to be a bit hard to understand, is there any evidence for this claim?

- Alg.2, does it always terminate? Means such a composition can always be found? If not, what has to be done?

- what is the meaning of blue color text in Algs. 1,2?

- how about using other metaheuristics than PSO?

- some language issues: " are deemed to NP-hard" "has show its promise" "is consider to be" "from the an initial service queue"

Candidate for the best paper award? : No