

Summary: Maria and her Team participated in the Ontology Alignment Evaluation Initiative 2009. (compiled on May 2010).

In 2009 we have participated again in the OAEI evaluation. DSSim was among the two systems that had the highest participation rate (7 tracks out of 8), where the number of participating systems has been 16 this year. It is important to point out that our participation rate in 2008 was one of the highest as well.

Concerning the quality of the results in 2009 our system has performed comparably well, however our position in terms of precision and recall varies slightly across the tests. For example in the benchmarks our system comes really close to the best performing systems. Our precision result is consistent and high, however the recall oscillates and worsen on tests where the entity names and comments are suppressed or replaced with random characters like "fbvetyevc". This can be explained with the fact that our system extensively consults background knowledge e.g. WordNet in order to make sense and create some sort of understanding of the entities. If this fails the system can only utilise the similarities in structural dependencies of the ontology, which does not always help to retrieve all the relevant mappings.

DSSim has made a considerable improvement in the anatomy track in 2009. Considering the F-value of all ten participating systems we have jumped to the upper middle range. It is worth to point out that the best systems are not the same as in the benchmarks test. Anatomy track depends considerably on the medical terminology therefore systems that use and has been designed for domain specific mapping like SOBOM performs among the bests on this track.

On the directory track our results has been consistently good compared to the previous years and we were among the best performing systems. However on one test namely on the conference track our result have worsened compared to the previous years. This can be due to the fact that this year we have tried to implement new compound noun comparison method that exploits the semantic relations of the entities.

During 2009, there were new instance matching tasks like IIMB, Axa Rexa DBLP or vlc tracks where DSSim has not achieved results that were among the best systems. This is due to the fact that our systems is not conceived for instance matching and therefore if we intend to develop our system into that direction more work needs to be done. On the other hand, it is also true that on the vlc task DSSim was one of the 2 systems which could actually participated because of the large and complex nature of the task.

Our overall conclusion concerning our system is very positive, however it seems that we have reached a theoretical threshold with our system that cannot be improved easily without reconsidering several parts of our proposed solution. This work however could be done in a future developments that involve establishing new cooperation with other research teams.

My big thanks to my DSSim team: Miklos Nagy and Piotr Stolarski

[Back to Maria's Homepage](#)