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Concerning: recommendation for thesis of Joe Raad for the SWSA Distinguished Dissertation Award

I have co-supervised the thesis of Joe Raad, who conducted his research in the LaHDAK team of the LRI laboratory in collaboration with the French National Institute for Agricultural Research. Joe started his PhD in October 2015, and successfully defended his work in November 2018.

During his thesis, Joe has worked on the problem of managing identity links in the web of data in the setting of the LIONES project (PhD funded by the Center For Data Science of Paris Saclay). The quality of the identity links declared in a data graph is a key topic. Indeed, these links are used to query and integrate data from multiple sources. However, a large number of these links are actually incorrect and may lead to erroneous inferences. Joe has co-created a new service of identity link management (sameAs.cc) that allows users to access to equivalence classes that are discovered across the Linked Open Data (more than 500M links). He also proposed an innovative approach that aims to detect incorrect links without requiring any assumption on the data. This approach scales to the whole set of triples of the Linked Open Data (dump of the LOD 2015). These first two contribution were carried out in collaboration with Wouter Beek and Frank van Harmelen, research members of the Vrije Universiteit Amsterdam. Finally, he has defined a semantic notion of contextual identity and has developed an algorithm to detect the most specific contexts that obey a set of user constraints (i.e. biologists with whom he collaborated on scientific data). During these three years of PhD, Joe Raad has shown his ability to master the theoretical and practical aspects of the Semantic Web domain. He demonstrated his skills to define a research problem, interact with experts from other domains, propose innovative solutions, and evaluate them on real and massive data. All the resources and tools he developed have been made available to the community. Finally, the interest of the scientific community for his work is attested by several publications of quality, and by awards for two different contributions (best paper award in a French KR conference “IC 2017”, and the best resource paper in “ESWC 2018”). In addition, his PhD thesis was recently selected as the second-best French thesis in Artificial Intelligence (an annual award given by AFIA). For all these reasons, I highly support his application for the SWSA thesis award.

A handwritten signature in blue ink, appearing to be 'Nathalie Pernelle'.