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SWSA Distinguished Dissertation Award Nomination Mr. Marcin WYLOT, Ph.D.

Dear SWSA Members, Dear Experts,

I would like to nominate my former student, Mr. Marcin Wylot, for the SWSA Distinguished Dissertation Award.

Mr. Wylot was awarded his Ph.D. degree in 2015.

In his thesis, Mr. Wylot tackles the problem of how to compactly store and efficiently query semi-structured data, with an emphasis on RDF data. This is a problem of great significance, given the rapid deployment of RDF and Linked Data technologies on the Web, and the inability of standard (e.g., relational) systems to efficiently process such data. Mr. Wylot proposes new physical storage structures to handle RDF data—as well as accompanying lineage information—more efficiently than state-of-the-art techniques. He also designs and implements new query execution strategies leveraging the peculiarities of his storage models. In this context, he is the first researcher to propose query execution techniques for provenance-aware RDF queries. Finally, Mr. Wylot experimentally validates his methods through extensive empirical evaluation campaigns demonstrating that his techniques outperform all state-of-the-art approaches tackling the same issues.

Overall, I feel like Mr. Wylot's dissertation is outstanding both from a technical and from a scientific perspective. The research questions explored by Mr. Wylot in his thesis are exceedingly important given the rapid deployment of RDF data in the cloud. The contributions that Mr. Wylot put forward are very innovative and convincingly argue for bridging the gap between today's information systems and recent advances in semi-structured and provenance data management. His contributions are from my perspective both scientifically sound—leveraging state-of-the-art methodologies and abstractions from the Semantic Web and database fields—as well as technically exciting (with compelling models, convincing algorithms, and comprehensive evaluation campaigns). Furthermore, I would like to point out that the author established the high value of his contributions through a singularly successful series of publications in the very best and most competitive publications venues in our field (i.e., ISWC, WWW, VLDB, and TKDE).

To summarize, I consider Mr. Wylot's thesis as being of considerable significance to our research field. It is the best thesis focusing on Semantic Web technologies that I have read in 2015 and as such I fully support Mr. Wylot's nomination for the SWSA Distinguished Dissertation Award. Do not hesitate to contact me should you have any question about Mr. Wylot or his work,

Best Regards,



Philippe Cudré-Mauroux



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