

HPI Kolloquium 13.02.2014, 16:00 Uhr

Hasso-Plattner-Institut, Vorlesungsgebäude, Auditorium 1 Campus Griebnitzsee, 14482 Potsdam

"Entity-Centric Data Management"

Prof. Philippe Cudre-Mauroux

University of Fribourg, Switzerland

Abstract

Until recently, structured (e.g., relational) and unstructured (e.g., textual) data were managed very differently: Structured data was queried declaratively using languages such as SQL, while unstructured data was searched using boolean queries over inverted indices. Today, we witness the rapid emergence of entity-centric techniques to bridge the gap between different types of content and manage both unstructured and structured data more effectively. I will start this talk by giving a few examples of entity-centric data management. I will then describe two recent systems that were built in my lab and revolve around entity-centric data management techniques: ZenCrowd, a socio-technical platform that automatically connects HTML pages to semi-structured entities, and TripleProv, a scalable, efficient, and provenance-enabled back-end to manage graphs of entities.

Short Biography

Philippe Cudre-Mauroux is a Swiss-NSF Professor and the director of the eXascale Infolab at the University of Fribourg in Switzerland. Previously, he was a postdoctoral associate working in the Database Systems group at MIT. He received his Ph.D. from the Swiss Federal Institute of Technology EPFL, where he won both the Doctorate Award and the EPFL Press Mention in 2007. Before joining the University of Fribourg, he worked on distributed information and media management for HP, IBM Watson Research (NY), and Microsoft Research Asia. He was Program Chair of the International Semantic Web Conference in 2012 and General Chair of the International Symposium on Data-Driven Process Discovery and Analysis in 2012 and 2013. He recently won the MICS Swiss National Center in Research 2001-2012 Award and a Google Faculty Award. His research interests are in next-generation, large-scale data management infrastructures. Webpage: http://exascale.info/phil

Host: Dr. Matthias Uflacker