A hitchhiker’s guide to Ontology

Abstract: In this talk, I will present our recent work in the area of knowledge bases. It covers 4 areas of research around ontologies and knowledge bases: The first area is the construction of the YAGO knowledge base. YAGO is now multilingual, and has grown into a larger project at the Max Planck Institute for Informatics and Télécom ParisTech. The second area is the alignment of knowledge bases. This includes the alignment of classes, instances, and relations across knowledge bases. The third area is rule mining. Our project finds semantic correlations in the form of Horn rules in the knowledge base. I will also talk about watermarking approaches to trace the provenance of ontological data. Finally, I will show applications of the knowledge base for mining news corpora.