Knowledge Graphs, Description Logics and Reasoning on Data

C. Bourgaux, M. Thomazo
Course Organization

Lecturers

▷ Camille Bourgaux, CNRS researcher at ENS
  ▷ camille.bourgaux@ens.fr

▷ Michaël Thomazo, Inria researcher at ENS
  ▷ michael.thomazo@inria.fr

Material and schedule

▷ Course material will be online at https://www.di.ens.fr/camille.bourgaux/teaching/IASD-KGDL/index.html

▷ Courses: February 17 and 24, March 31, April 7, May 12 and 19, June 23 and 30 from 8:30 to 11:45

▷ Exam: July 4 from 9:00 to 12:00

▷ References given at the beginning of each part of the course
  ▷ If you have trouble accessing them (paywall,...), email us

▷ Please install Protégé (do not use WebProtégé):
  http://protege.stanford.edu/
Outline of the Course

1. Knowledge graphs and ontologies
   - Reminders on RDF, SPARQL
   - Goal of this course: Accessing data through an ontology
   - Ontology formalisms

2. Ontological reasoning
   - Classical reasoning tasks
   - Satisfiability for $\mathcal{ALC}$
   - Classification for $\mathcal{EL}$

3. Ontology-based query answering: The basics
   - Ontology based data access
   - Decidability issues
   - Chase
   - Query rewriting

4. OBQA: Advanced topics