

Semantic Web Technologies

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The Semantic Web group @LiU

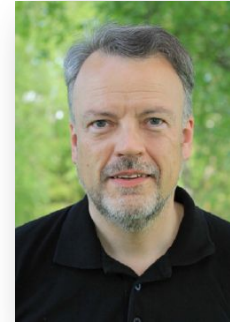
Faculty



Eva Blomqvist



Olaf Hartig



Henrik Eriksson



Patrick Lambrix

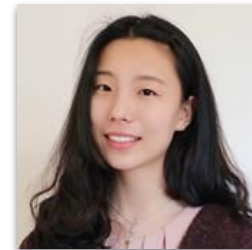
PhD students



Robin Keskisärkkä



Huanyu Li



Sijin Cheng



Riley Capshaw

Shahrzad Khayatbashi

Ying Li

Mina Nikooie

Schedule of the week

- Monday - Introductions and basics + SPARQL
- Tuesday - DL + RDF and data management
- Wednesday - Ontology engineering and ODPs
- Thursday - More RDF and SPARQL + ontology engineering mini-project continued
- Friday - Ontology alignment and debugging + SHACL + RSP

Morning session: 09:00/09:30-12:00

Afternoon session: 13:00-17:00/16:00

This is a practical course!

- Today you don't need to download an install anything
- For Tuesday not necessary to prepare, but if you want to pre-download some things, look at:
<http://www.ida.liu.se/research/semanticweb/events/SemWebCourse2020/HandsOnRDF.shtml>
- For Wednesday you need an ontology engineering tool, such as:
 - Protégé (<https://protege.stanford.edu/>)
Free open source tool, preferably download the latest version of the desktop client - alternatively use the WebProtégé but it lacks some functionality

Requirements for PhD students

- Lecture attendance and active participation in all hands-on sessions during the week
- Assignments = completing and handing in a selection of the exercises of the hands-on sessions
- A project to complete after the course
 - Reading projects: select a topic from the course, read at least 5 research articles in that area, write a summary of those articles (5-10 pages)
 - Practical project: select a technology discussed in the course, apply it on something related to your own PhD project, write a summary of what you did and your experience/evaluation of the technology (5-10 pages)
 - Alternatively: a practical project provided by us

Requirements for PhD students (cont.)

- Project topics/plans are to be developed during the week
- Each student should present their project idea to the others, either on Thursday (11:15-12:00) or Friday (11:30-12:00)
 - About 5 minutes per student - sign up for either a Thu or Fri slot here: <https://forms.gle/Hv4nF22L8a5peJ4Q9>
 - No need for slides etc.
 - Present your idea and motivate why you want to do that, including how it relates to your PhD
 - Get feedback from us and the other students
 - For a practical project: if possible, show a sketch of how you imagine the practical setup of your work
 - What will you test and why? What software is involved? How will you evaluate the solution?

Expectations of the course

- Say **a few** words on
 - Who you are and where you are from
 - Your prior knowledge and experience of Semantic Web Technologies
 - Why you are taking this course
 - What you expect to take away from the course

Schedule Monday

- 09:15-09:45 Welcome and introduction
5 min break
- 09:50-10:50 Introduction to the Semantic Web vision (Eva)
10 min break
- 11:00-12:00 Introduction to RDF (Olaf)
lunch break
- 13:00-13:55 Introduction to ontologies (Eva)
5 min break
- 14:00-16:00 Introduction to the RDF query language SPARQL
(Olaf) - including some break(s) as needed
- 16:00-17:00 **Hands-on: SPARQL**

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