

Call for participation

SIKS Masterclass: Towards a Science of the World Wide Web

Monday 5 February 2007, 13.30 - 16.30h
Vrije Universiteit Amsterdam
Room C147 VUA (Exact Sciences Building)
De Boelelaan 1081a, 1081 HV Amsterdam

Program

- 13.30-13.45 Coffee/Tea and Registration
- 13.45-14.45 Prof. Dr. Jim Hendler (U Maryland/Rensselaer, USA):
Towards A Science of the World Wide Web
- 14.45-15.00 Coffee/Tea Break
- 15.00-15.30 Dr. Marta Sabou (Open University, UK):
Harvesting the Semantic Web
- 15.30-16.15 Prof. Dr. Peter Groenewegen (VU Amsterdam):
Communities and Networks: A Social Science Perspective
- 16.15- Discussion and Closure, with drinks etc. ("Borrel")

This SIKS Masterclass is hosted by the VU Amsterdam Research Centre VUBIS, and chaired by Prof. Dr. Hans Akkermans (VUA, Amsterdam).

It follows the public defense of the VUBIS-SIKS PhD thesis "*Social Networks and the Semantic Web*" by Peter Mika (10.45h, Aula), to which you are cordially invited as well.

If you would like to participate in the Masterclass, attendance is free, but please send an email message to office@siks.nl



Talk Abstracts:



Prof. Dr. Jim Hendler (U Maryland/Rensselaer Polytechnic Institute, USA):

Towards a Science of the World Wide Web

Computer Science research in the area of the World Wide Web has largely focused on improved search for individual web pages or on the modeling of Web connectivity (using the tools of networking). However, given the huge impact of the Web on our world, this seems to be an impoverished view. What are the principles of engineering that have made the Web flourish? How can we engineer new technologies that will extend the capabilities of the Web? What are the social impacts of Web use, and how can Web technologies both allow greater freedoms while preserving the ones we have?

In this talk, I will use some examples from Semantic Web and “policy aware” information access to demonstrate new Web technologies and how we might explore some of the trade-offs between making it easier to integrate information on the Web with protecting that information from abuse. I will explore some of the emerging trends on the Web including social networking, blogging, and beyond page search, and discuss some of the research and technology challenges that they pose to continued Web growth and access, and some new technologies being explored to address these challenges.



Dr. Marta Sabou (Knowledge Media Institute, Open University, UK):

Harvesting the Semantic Web

As the Semantic Web is finally taking shape (i.e., the amount of online ontologies has increased dramatically and the first semantic search engine (Swoogle) provides a quick access to these ontologies), the focus of the community is slowly shifting from building the Semantic Web to actually harvesting the large amount of online available knowledge. In this talk I will present work that subscribes to this paradigm shift by harvesting the Semantic Web to solve real life problems. First, I will describe how online knowledge is explored to establish high quality semantic mappings between two very large food thesauri. Second, I will focus on ongoing work in enhancing folksonomy search by discovering semantic relations between folksonomy tags with the help of online ontologies. Both lines of work indicate that, while many new and interesting research problems need to be solved, the Semantic Web is a powerful resource that can be successfully employed in a variety of contexts.



Prof. Dr. Peter Groenewegen (Fac. Social Sciences, VU Amsterdam):

Communities and Networks: A Social Science Perspective

The network aspects of communities can be analyzed by means of the methods of Social Network Analysis (SNA). A wide variety of communities, e.g. scientific communities as well as innovation networks of firms, appear to share quite general characteristics as *social* networks. In this talk I present a brief overview of the concepts and methods of SNA, illustrated by a number of practical examples. It is discussed how the World Wide Web provides a rich source of empirical data for studying social networks. One of the empirical examples of social networks that have been studied (see the PhD thesis by Peter Mika and <http://flink.semanticweb.org>) is the international Semantic Web research community itself.

Bios:

Jim Hendler is a Professor at Rensselaer Polytechnic Institute and formerly the University of Maryland. He has authored about 200 technical papers in the areas of artificial intelligence, Semantic Web, agent-based computing and high performance processing. One of the inventors of the Semantic Web, Hendler was the recipient of a 1995 Fulbright Foundation Fellowship, is a former member of the US Air Force Science Advisory Board, and is a Fellow of the American Association for Artificial Intelligence. He is also the former Chief Scientist of the Information Systems Office at the US Defense Advanced Research Projects Agency (DARPA), and a member of the World Wide Web Consortium's Semantic Web Coordination Group. He is the Editor in Chief of IEEE Intelligent Systems and is on the Board of Reviewing Editors for Science.

Marta Sabou is a Research Fellow at the Knowledge Media Institute (KMI) of the Open University, UK. Her research focuses on Ontology Evaluation and Selection and is performed in the context of two European projects, OpenKnowledge and NeOn. Previously, she was a PhD student at the Vrije Universiteit Amsterdam, under the auspices of the SIKS Netherlands Research School, where she was awarded a PhD degree for her research on Learning Ontologies in the context of Web Services and Semantic Web Service technology. In the context of the IEEE Intelligent Systems magazine "Ten to Watch" initiative, Marta has recently been nominated as one of the ten most promising young AI researchers in the world.

Peter Groenewegen is a Professor of Organization Science at the Faculty of Social Sciences, VU Amsterdam. He has a.o. been a supervisor of Peter Mika's PhD research work on Social Networks and the Semantic Web.