





centre for data science and systems complexity

DSSC SEMINAR

You are cordially invited to the DSSC seminar on **5 January 2016, 11.00-12.00, Bernoulliborg, room 5161.0267**

Data Science in the Picture

Speaker: Prof. Dr. Marcel Worring Amsterdam Data Science

University of Amsterdam



Abstract

In this talk I will start of by introducing Amsterdam Data Science, a collaboration bringing together scientists from the Amsterdam University of Applied Sciences, Centrum Wiskunde & Informatica, University of Amsterdam, and VU University. From there I will focus on the work we are doing in our group, developing multimedia analytics approaches in which we combine analysis and visualization to access large image collections.

In particular, I will report on a novel multimedia analytics model based upon our extensive survey on over eight hundred papers of which hundred papers were identified as being most relevant for the topic. In the model, the need for semantic navigation of the collection is emphasized and multimedia analytics tasks are placed on the exploration-search axis. The axis is composed of both exploration and search in a certain proportion which changes as a data scientist progresses towards insight. Categorization is proposed as a suitable umbrella task realizing the exploration-search axis in the model. Finally, the pragmatic gap, defined as the difference between the tight machine categorization model and the flexible human categorization model is identified as a crucial multimedia analytics ingredient. Multimedia Pivot Tables are introduced as a first implementation of this model providing a flexible and highly interactive methodology for gaining insight in large picture collections.

Biography

Marcel Worring is full professor in data science for business analytics (Amsterdam Business School) and associate professor in the Informatics Institute (IvI). He is associate director of Amsterdam Data Science (www.amsterdamdatascience.nl). His research is in Multimedia Analytics, focussed on the integration of Multimedia Analysis, Multimedia Mining, Information Visualization, and Multimedia Interaction into a coherent framework which yields more than its constituent components.

