Data Science Seminar Series

Wednesday, October 5, 1:30-2:30 pm, OM1241

TITLE

Knowledge representation and machine learning

SPEAKER

Dr. Mila Kwiatkowska

ABSTRACT

Data constitute 33% of data science. Yet, there is no consensus on the definitions of the concept of data. Consequently, the question "What is the subject matter of data science?" remains to be answered. This presentation will not answer this important question, but it will discuss some of the problems in defining the underlying terms: data, metadata and knowledge. The presentation will focus on (1) data as representation of reality (semiotic function of data), (2) data models as representation of multiple views of reality (multidimensional perspective), and (3) metadata as representation of explicit knowledge about reality (knowledge management perspective).

The inspiration for this topic came from a book "Data and Reality" written by William Kent and published 46 years ago. The main purpose of this presentation is to stimulate discussion on the concept of data and the pros and cons of data-driven culture.

BIOGRAPHY

Dr. Kwiatkowska is an Associate Professor in the Computing Science Department at Thompson Rivers University. Her interests in teaching and research are in database systems, data warehousing, data mining, text mining, decision systems, and knowledge representation. She received the Ph.D. degree in Computing Science from Simon Fraser University, the M.Sc. degree in Computing Science from the University of Alberta, and the M.A. degree in Interdisciplinary Studies of Polish Philology and Informatics from the University of Wroclaw in Poland. She is the recipient of grants from NSERC, CIHR, and BC Interior Health. She has been collaborating with the TRU Respiratory Therapy Clinic for more than 10 years on several local and international projects. She has supervised and co-supervised numerous interdisciplinary research projects for medical and ecological applications. She has been involved in the development of the database systems for biological, ecological, oil and gas revenue, and land-titles data. She is the author and co-author of over 30 peer-reviewed papers and book chapters

https://www.tru.ca/science/masters-degrees/mscds/Data_Science_Seminar_Series.html