Privacy and Data Mining: New Developments and Challenges

Stan Matwin

School of Information Technology and Engineering (SITE)
University of Ottawa (Canada)
stan.matwin@live.com

There is little doubt that data mining technologies create new challenges in the area of data privacy. In this talk, we will review some of the new developments in Privacy-preserving Data Mining. In particular, we will discuss techniques in which data mining results can reveal personal data, and how this can be prevented. We will look at the practically interesting situations where data to be mined is distributed among several parties. We will mention new applications in which mining spatio-temporal data can lead to identification of personal information. We will argue that methods that effectively protect personal data, while at the same time preserve the quality of the data from the data analysis perspective, are some of the principal new challenges before the field.