visual analytics and its problems

July 4, 2018 9:00–17:00

Karolina Conference centre, Vilnius

Dr. Gennady ANDRIENKO and Dr. Natalia ANDRIENKO

Fraunhofer Institute IAIS - Intelligent Analysis and Information Systems

Germany

Local organizer: Giedrė Beconytė, Vilnius university

Visual analytics aims to combine the strengths of human and computer data processing. Visualization, whereby humans and computers cooperate through graphics, is the means through which this is achieved. Sophisticated synergies are required for analyzing spatio-temporal data and solving spatio-temporal problems. It is necessary to take into account the specifics of the geographic space, time, and spatio-temporal data.

While a wide variety of methods and tools are available, it is still hard to find guidelines for considering a data set systematically from multiple perspectives. To fill this gap, we systematically consider the structure of spatio-temporal data, possible transformations, and demonstrate several workflows of comprehensive analysis of different data sets, paying special attention to the investigation of data properties. We shall show several workflows of analysis of real data sets on aviation, city traffic, human mobility and football.