Interactive Data Visualization and Analysis

Through a vast variety of sensors and other forms, data is collected at an increasing rate. Analyzing the resulting data sets efficiently and effectively is becoming more and more important. Different types of data analytics approaches, including machine learning, can help with analyzing some of that data. Often times, it is unknown what the data really represents. Interactive visualization techniques can help with exploring these data sets to get a better understanding before applying more automated approaches. This makes intuitive visualization approaches one of the main pillars in this data exploration phase in order to be able to understand the data and extract knowledge from it. This presentation will discuss various approaches for more intuitive data visualization and discuss a variety of applications to showcase some of these techniques.