

## The Iterative Process of Interactive Visual Analysis

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**Friday Sep 14, 2012, 10.15-11.15**

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### Abstract:

One central characteristic of our information age is that increasingly often we should exploit the wealth of available data for the sake of learning, decision making, as well as other tasks. A promising approach - not at the least also targeted by visual analytics - is to integrate the strengths of computers (fast computation, efficient handling of large datasets, comparably low costs, etc.) with the strengths of the users (perceptual capabilities, considering domain know-ledge, detecting the unexpected, etc.). In this talk, we look at one possible solution, i.e., the concept of interactive visual analysis, and describe it as an iterative process, enabling the integration of computational and interactive means for data exploration and analysis. We consider a data scenario that

opposes dependent and independent data dimensions (like in a table), general enough to match many different application cases. We focus on the case of multivariate data, but also address the case of high-dimensional data and opportunities for exploring and analyzing such data. After all, we think of interactive visual analysis as an iterative process, where each step is performed on the basis of a toolbox with computational and interactive visual solutions.

