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Stochastik IV – Graphical Data Analysis

Exercise Sheet 7: Interactive Graphics

Interactive Graphics and the Arrests dataset

Consider the dataset `Arrests` available in the R package *effects* and carry out an analysis of the dataset with `Mondrian`. You may also use R, where you see fit.

1. What information can you extract from the dataset?
2. Describe how you reached each of your conclusions. Which graphics did you draw? Which interactive tools, if any, did you use? (It will be more interesting for discussion if you record all of your analyses and not just the ones that in retrospect proved useful.) What interactive tools would you have liked to have had that are not available in `Mondrian`?
3. Which graphics would you use to present your results? How do they differ from the graphics you used to find the results? Are `Mondrian` graphics good enough for this purpose or would you have to use R? If so, why?
4. Did you use R in any of your analyses? Could those capabilities be made available in `Mondrian` via `Rserve`? How should the interface be designed to give access to those parts of R?

Extra: Attitudes to the Occupy Wall Street Movement

The webpage

www.nytimes.com/interactive/2011/11/09/us/ows-grid.html

is an interactive graphic published in the New York Times.

Is this an effective graphic? What information can you draw from it? Would another graphic form be better than these point plots?

Where do the data behind the graphic come from? How reliable are they likely to be?

A main feature of this graphic is the colouring of the points according to the data on five different questions. What static graphics might be used instead? Could interactive graphics be used? Could all five questions be included together instead of only individually?