



VIS: OPTICS_{vis}

Milestone 3

Group 11

12. Dezember 2017

Fakultät für Informatik

Agenda

1. Project

Definition

Data

2. Users and Tasks

3. Demo

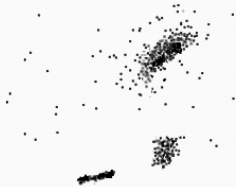
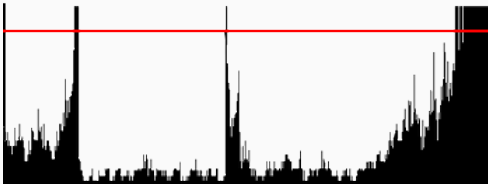
4. Visualization techniques

5. Challenges and Problems

Project

Project definition

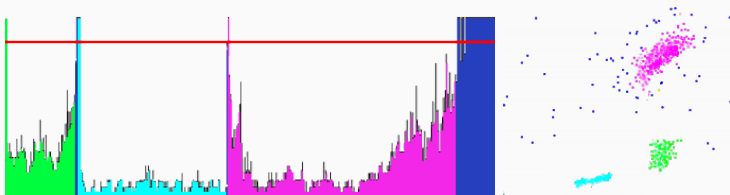
- OPTICS: density based clustering
 - algorithm jumps between points in some order
 - records jump distances
- output somewhat hard to read
 - point order
 - a list of numbers
- staple visualization method: the bar chart



Project definition

- colorizing helps a lot
- but how does it *work*?
- how do these numbers relate to the data?

→ OPTICS_{vis}



- threefold:
 1. points: real-valued and two dimensional (user input)
 2. algorithm output: point ordering and reachability distances
 3. metadata: to be collected as the algorithm runs
- visualize both the data set and the results
- give a rough overview of the steps the algorithm did

Users and Tasks

- Teachers
 - for educational purposes
- Researchers
 - exploration
 - testing before practical usage
- Anyone
 - exploration

Tasks

- Exploration
 - get a feeling for the algorithm, get to know it
- Education
 - learn about the algorithm and how to interpret the output
- Testing
 - give an idea if the algorithm fits the users problem
 - see if result/output is satisfactory and useful

Demo

Visualization techniques

Visualization techniques

- filtering
- linking & brushing
- tooltips
- zooming
- heat map
- scented widget
- aggregation

Challenges and Problems

Challenges and Problems

- slow implementation
- would benefit from backend