Diploma Thesis:
Visualization of Calendar Data

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Contents

- Motivation

- Main Features
  - Heightfield Visualization of Calendar Data
  - Interaction on the Calendar Heightfield
  - Advanced Statistic Views

- Summary

Motivation

- Calendars to organize and visualize
- eCalendars

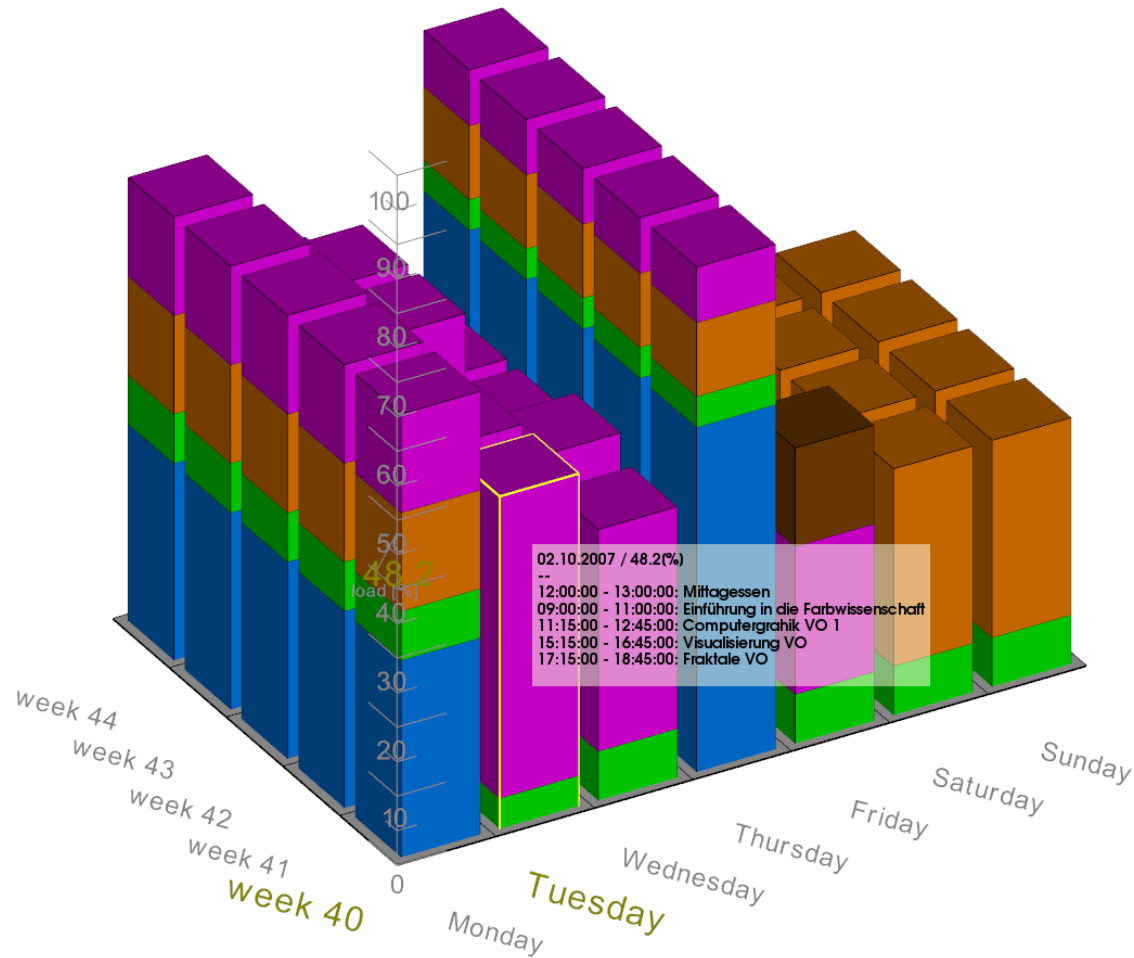| „available"	„missing"
create and delete events easily	variable views
to-do's	properties
recurrences	dependencies
sharing (collaboration)	analysis

Main Features

- Heightfield Visualization of Calendar Data
  - ◆ workloads, color, details, dependencies

- Interaction on the Calendar Heightfield
  - ◆ highlighting, importance visualization, fuzzy scheduling

- Advanced Statistic Views
 - ◆ semantic pattern and trend views

Heightfield Visualization of Calendar Data

- **workloads as height values**

- **color to distinguish categories**

- **highlighting**

- **detail information**

job
lunch
sports
study
theater

02.10.2007 / 48.2(%)
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12:00:00 - 13:00:00: Mittagessen
09:00:00 - 11:00:00: Einführung in die Farbwissenschaft
11:15:00 - 12:45:00: Computergrahik VO 1
15:15:00 - 16:45:00: Visualisierung VO
17:15:00 - 18:45:00: Fraktale VO

- **fuzzy tasks**
  - start time
  - end time
  - both
- **additional parameters**
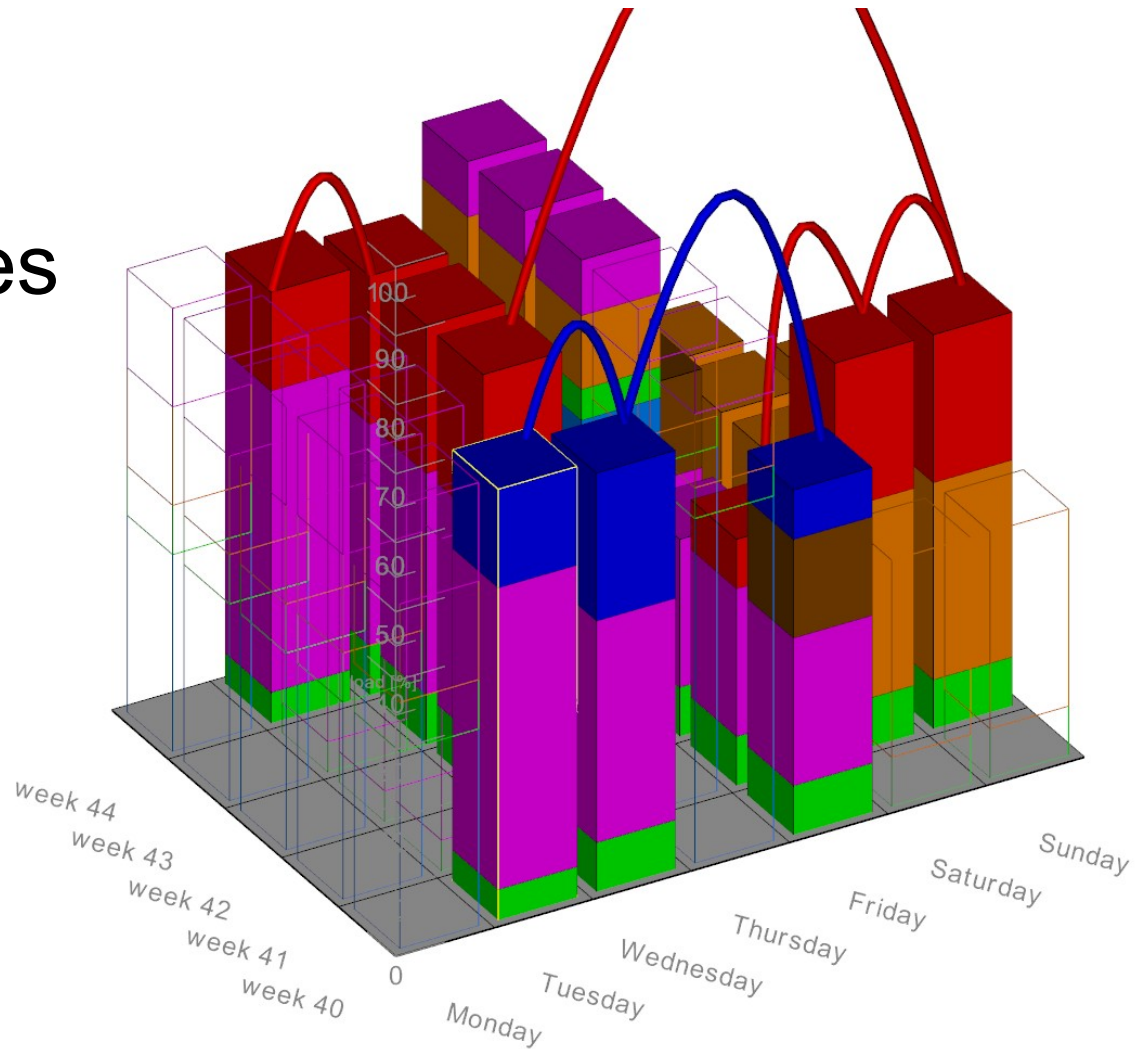 - estimated effort
  - cluster size
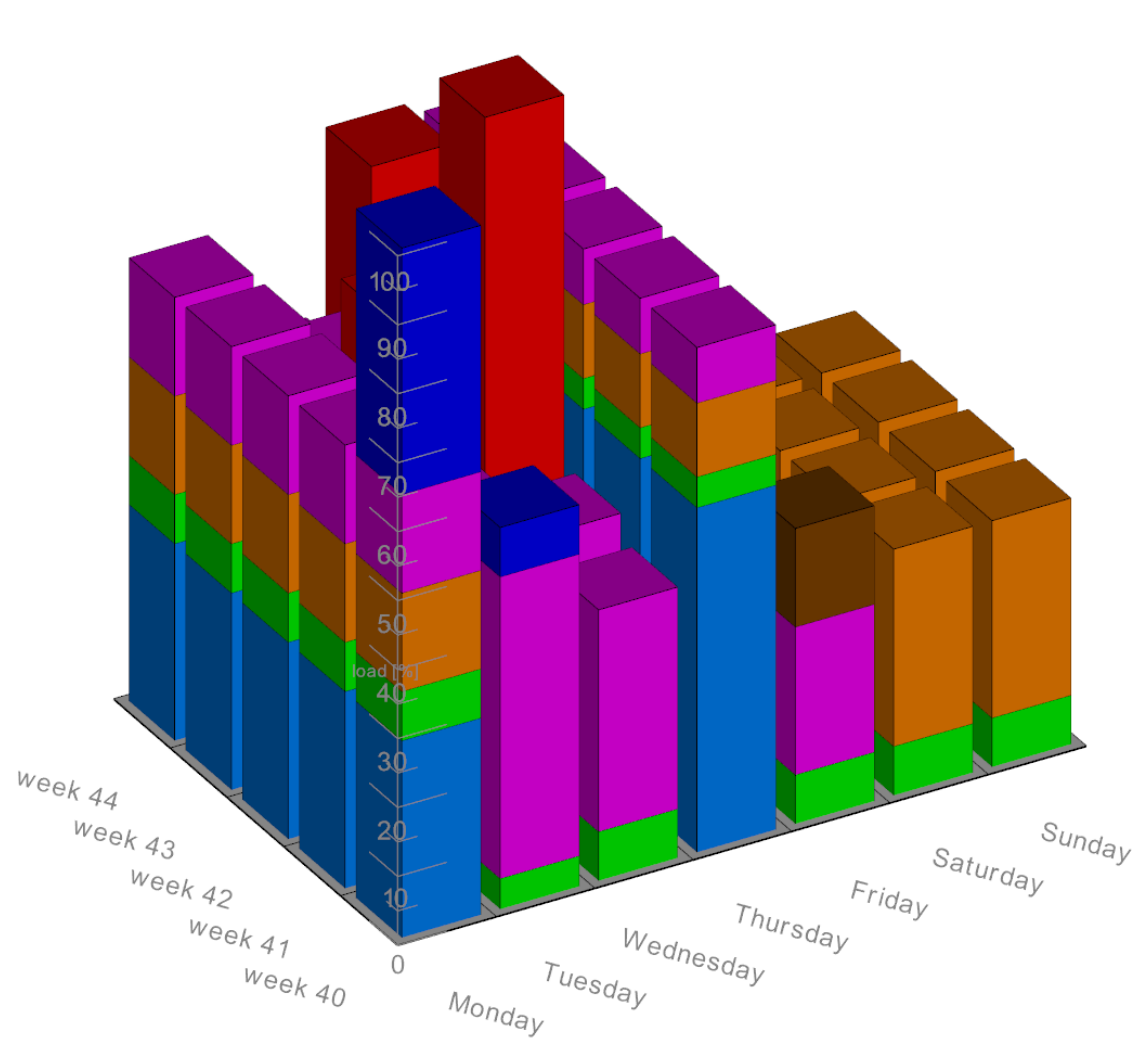
- **fuzzy scheduling**
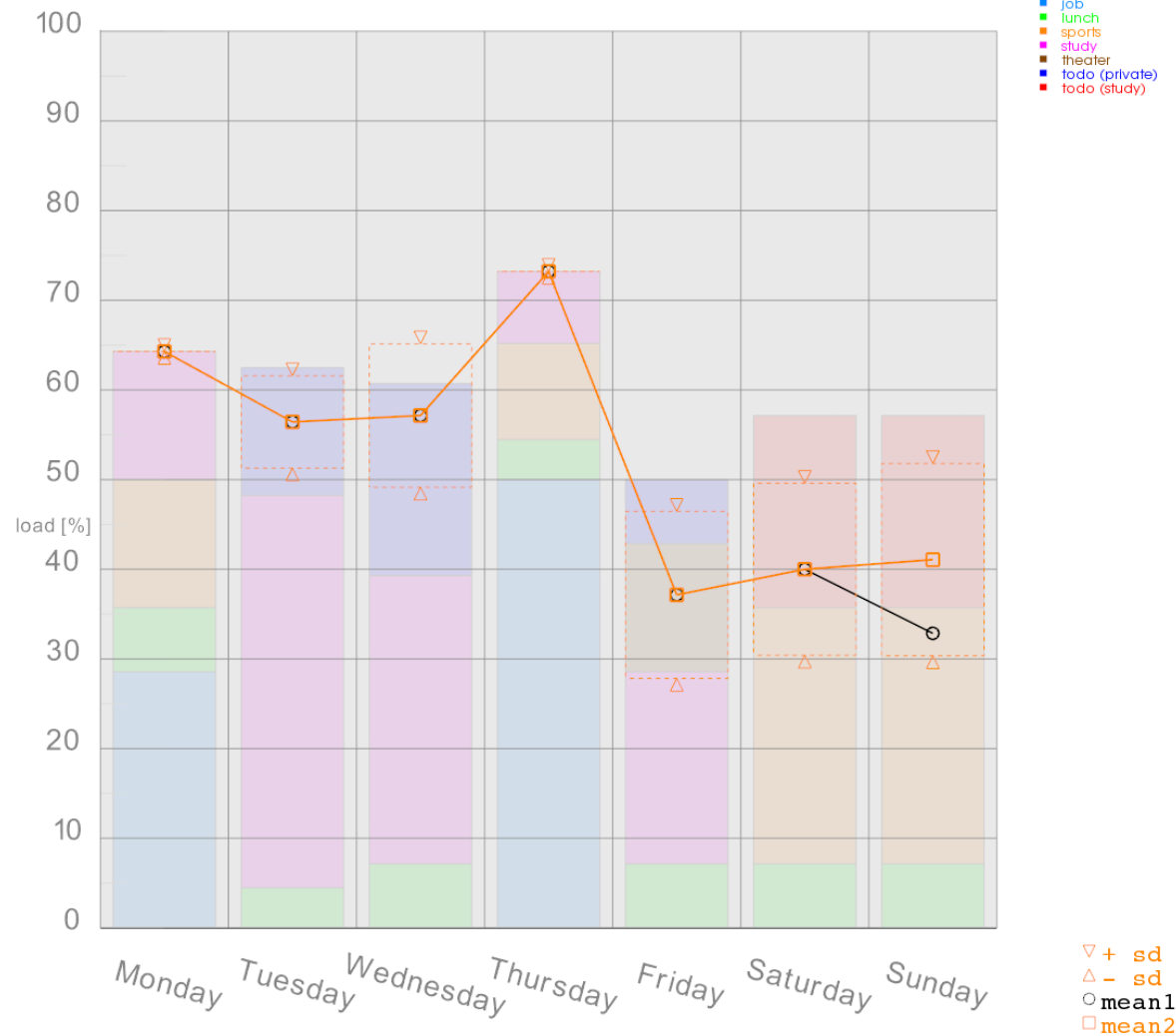
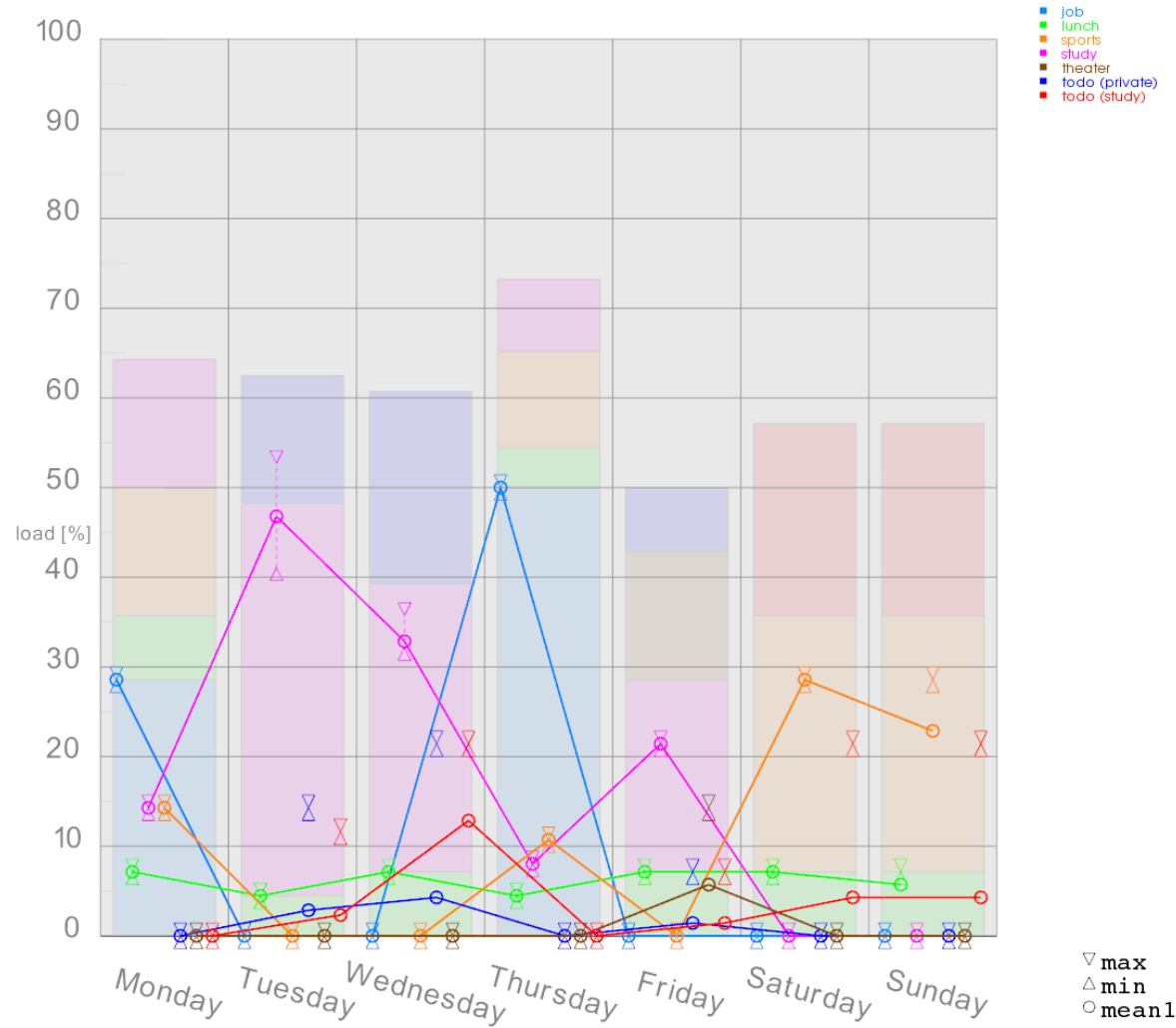- **distribute fuzzy tasks on-demand**
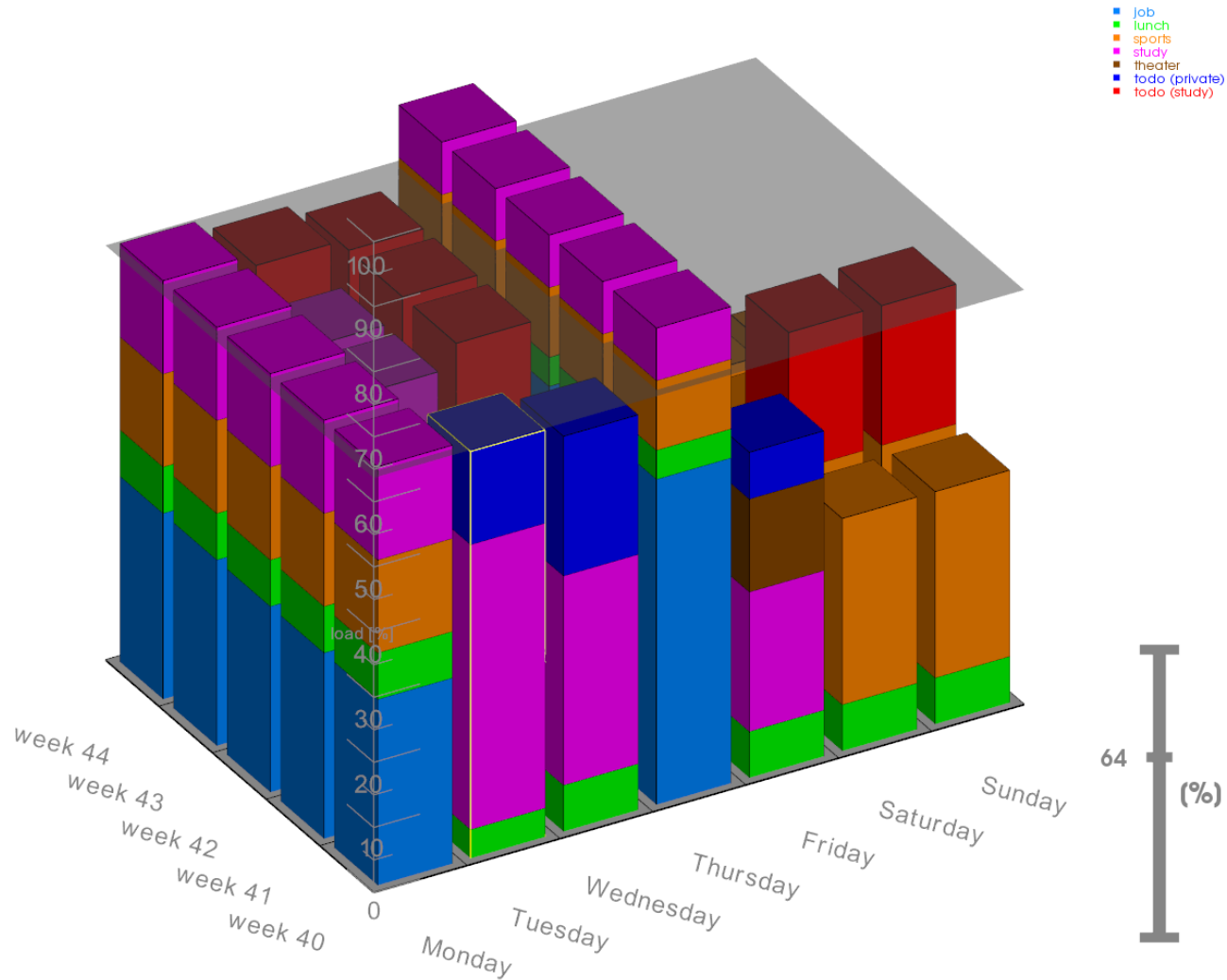
- **dependencies**

- **importance visualization**

- bar chart
- semantic views
  - ◆ smoothly fade-in
- descriptive statistics
  - ◆ arithmetic mean
  - ◆ standard deviation

Advanced Statistic Trend View

- **for each category**

- **descriptive statistics**
  - ◆ arithmetic mean
  - ◆ range

Advanced Statistic Pattern View

- **quadrangles**
  - ◆ size
  - ◆ color

- **size = overall workload**

- **color blending = categorical influences**

Summary

- Interaction and visualization techniques to explore and schedule calendar data
    - ◆ focus on workload distribution
    - ◆ showing dependencies
    - ◆ scheduling of fuzzy tasks
    - ◆ find patterns and/or trends

- Exchange calendar data with common calendar applications.

- Video

Thank you for your attention.