# Overview of the Talks of Other Students

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**Abstract** This paper provides a summary of the talks given by students during the "Data Visualization and Mining Seminar" in WS 2015/16, as well as the opinions of the author of this summary on each of the talks.

**Keywords:** visualization, data mining, talk summary

# 1 Talk 1

*Author:* **Alexandros Papanikos**
*Topic:* **Spatial Data Mining**

*Summary:*
This talk introduced the area of spatial mining as "discovering non-trivial, interesting and useful patterns from large datasets". Alexandros presented the reason why this taks is difficult, such as

- complexity of data
- growth of the spatial data collection
- need for high efficiency of the algorithms being used

Some of the most common problems were mentioned, such as clustering.
A couple of applications were described as well, such as

- GIS (geographic information systems)
- medical imaging
- robot navigation
- public health
- transportation
- environmental science (climate change...)
- computer cartography
- ...

Some of the tasks that spacial data mining aims to accomplish:

- classification
- finding association rules (What belongs together?)
- discriminate rules (finding differences between parts of database)
- trend detection (finding temporal patterns in data)
- ...

*Remarks:*
*Pros:*
Alexandros gave a good overview of the topic, the problems-applications-goals structure was helpful, making it possible to create a mental picture of the field even if one has not dealt with the topic before.
He managed to make many general examples, mentioning areas where his topic is relevant, as well as introducing some technical terms from his field, but not too many, which would have overwhelmed the audience.

*Cons:*
The talk was a bit too short (only 15 minutes). Maybe to fill the gap, some of the content of the 2. half of the talk culd have been outlined, or some specific algorithms could have been mentioned.
Also, more specific examples could have helped to create a more persistent mental picture of the topic in the heads of the audience, like describing one scenario in which spatial data mining is used.
Also missing was a clear and simple definition of the term "spatial data".

## 2 Talk 2

*Author:* **Dimitris Bourgiotis**
*Topic:* **Data Mining in Medical Data**

*Summary:*
*Remarks:*
*Pros:*
*Cons:*