Reviewers:
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Review of Group 5 Final Book Chapter Presentation

Title:
Introduction to Spatio-temporal Databases (or Trends and Applications???)

by
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**Problem Motivation:** What kind of research (e.g. Basic or Applied research) did the talk relate to? If it was basic research what fundamental questions or open problems did the speaker relate to? If it was applied research, what application use cases / examples/ questions did the speaker relate to? Do they have societal significance/are they made up? If they are made up what are some realistic application questions that can be addressed? Briefly explain within 75 words.

The presentation focused on Introduction to Spatio-temporal Databases, which involved introduction to spatio-temporal databases concepts and overview as well as few applications. Though the talk did not address much about the societal significance, it is provided in the book chapter in their website.

**Problem Statement:** What research problem / software prototype did the talk attempt to solve / build? Are the listed constraints reasonable? Why or Why not? Was the input / output well defined or easy to understand via a simple example? (75 word limit)

This book chapter is attempting to provide an understanding of spatio-temporal databases. The presenters have added few new topics like taxonomy and data models, file organization and indices.
Challenges: Are the challenges articulated clearly (and possibly illustrated via an example)?
If so, what are they and identify their category (e.g. computational, statistical, others)?

Briefly describe some improvements that can help articulating challenges easier? (75 Word limit)

The presenters provided an explanation on the different data types needed to store spatio-temporal objects. The main challenges are in providing efficient indexing scheme to process the handling of spatio temporal data. Since this is an introductory slide, detailed explanation of a single topic is not possible, hence a brief overview is sufficient. Presenters could have elaborated a bit more on the indexing, as that would have improved the understanding of the challenges better.

Proposed Approach: Did the talk explain the key elements of the proposed approach clearly via the use of suitable examples? If so what were the key elements? Did the proposed approach honor all the constraints listed in the problem statement while achieving the goals listed in the problem or were there some (simplifying) assumptions? If so, what were they? Briefly explain (and possibly include suggestions to improve the proposed approach to solve the stated problem). (150 Word Limit)

Presentation provided a brief overview as well as the data types and indexing schemes for spatio-temporal data. However, it could have covered other topics like, architecture, latest trends and applications in detail, to give an overall view of spatio-temporal DB.

Novel/Better: Did the talk give a reasonable (e.g. thorough / acceptable) classification of related work and identify their limitations via examples? Was the novelty of the proposed approach clear from the classification scheme used in the talk? If not, how can it be improved?

Did the talk emphasize on how the proposed approach was better with respect to related work via additional examples? If not, how can it be improved? (100 Word Limit)

Since this is a book chapter, it should mostly consider well understood concepts which are beyond novel and research stage and hence not applicable.

Validation: Did the talk provide hints about the validation methodology or provide examples to validate their contribution claims? (50 Word Limit)
Presentation Critique: Rate the talk on a scale of 0(poor) to 10 (excellent) and provide a brief justification (50 Words) while suggesting areas for improvement on the following:

• Was the talk accessible to an "intelligent lay person"? 8
  The talk explained the STDBMS concepts well.

• Did the talk emphasize a central message that conveys the overall value of the work being executed? 9
  • yes, it clearly states the overview of STDBMS, could have provided a few more topics to cover the STDBMS concepts.

Did the talk attempt to relate to the audience and showed effort in conveying key ideas clearly? 8
  • yes,

Was the speaker's response to questions satisfactory? 9
  • yes.

How did the talk do on covering the 6 elements? Kindly rate each element separately and include a brief justification for each.

  o Problem definition: 8 – did not provide the overview of STDBMS, it only had slides related to data types and other things not a brief introduction on the topic.

  o Problem importance: 8

  o Problem hardness: Not applicable.
o Description of Methods: 8 – Could have provided more information on the different indexing schemes as well as on the architecture of STDBMS.

o Novelty of methods: not applicable

o How are the methods better? Not Applicable.

Areas for improvement:

- It is little unclear as to why they are worked on introduction to spatio-temporal databases when the original title was “trends and applications”. Not sure if they got their book chapter topic changed along the way.

- Also not very clear on the book chapter, as if it was chapter 1, then it is a total new topic for STDBMS and if it was chapter 8, as provided in the group page then it should have had a comparison with a different book chapter. Hence unable to compare the old and new parts provided.

- Assuming the topic given to them is STDBMS, the presenters should have covered all the aspects of STDBS including architecture, latest trends and applications, which would have provided an overview of STDBMS.

- More information on the highlighted topics like file organization and indexing schemes could have been provided in the book chapter report.