Continuous k-Dominant Skyline Query Processing

CSCI 8701 Overview of Database Research
Project Revisions

Based on the peer-reviews, we have made the following revisions:

- The clarity of the paper has been improved.
- Introduction section has been made precise and clear by identifying the problem in the first paragraph.
- Also, a section describing motivation to study skyline and k-skyline queries has been provided with good examples.
- More background literature on general skyline queries and some applications of skyline and k-dominant skyline queries have been provided with real-world applications.
- A section on validation methodology has been added to show theoretically that the improved approach produces correct and complete results. Due to lack of time, we couldn’t complete the implementation to show a detailed performance analysis. We intend to show some performance analysis and possibly update this report with a section on tat within next week before presentation.
- As the reviewers felt that the paper is a bit challenging to read, the idea has been expressed in a coherent manner so that people new to the field can also understand without much difficulty.
- A small section briefly discussing some existing k-dominant algorithms has been added. So far there has been only one paper proposing the idea of k-domiance.


- Also the algorithms proposed in the above paper are not really suitable or cannot be extended trivially to deal with continuous scenarios.
- If I were to redo this paper now, I would think about a more novel technique for dealing with continuous queries in road networks. Also, I would conduct a more detailed experimental analysis for the methods discussed in this paper, by using real-life datasets and by comparing other skyline techniques.
- I wish I had some more time to work on the implementation. Truly, this whole area of skyline and stream processing is thoroughly exciting. We are planning to show atleast some of the results in our presentation.