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A Comparative Study of GTC and PSP Algorithms for Mining Sequential Patterns Embedded in Database with Time Constraints

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Abstract : This paper will consider the problem of sequential mining patterns embedded in a database by handling the time constraints as defined in the GSP algorithm (level wise algorithms). We will compare two previous approaches GTC and PSP, that resumes the general principles of GSP. Furthermore this paper will discuss PG-hybrid algorithm, that using PSP and GTC. The results show that PSP and GTC are more efficient than GSP. On the other hand, the GTC algorithm performs better than PSP. The PG-hybrid algorithm use PSP algorithm for the two first passes on the database, and GTC approach for the following scans. Experiments show that the hybrid approach is very efficient for short, frequent sequences.

Keywords : database, GTC algorithm, PSP algorithm, sequential patterns, time constraints
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