Mining Recurring Patterns in Time Series

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Authors:
Dharmesh Bhalodiya, Jaydeep Tadhani, Rajesh Davda

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Abstract

Periodic pattern mining consists of finding patterns that exhibit either complete or partial cyclic repetitions in a time series. Past studies on partial periodic search focused on finding regular patterns, i.e., patterns exhibiting either complete or partial cyclic repetitions throughout a series. An example regular pattern of Bat, Ball stats that customers have been purchasing items Bat and Ball almost every day throughout the year. The type of partial periodic pattern is recurring pattern, i.e., patterns exhibiting cyclic repetitions only for particular time intervals within a series. It's a very difficult task to identify those periodic frequent patterns within given threshold in time. To overcome these problems, we introduced modification in traditional PR-tree structure. And this structure improves overall efficiency by running time, Periodic Frequent Pattern generation and Memory consumptions.

References

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Index Terms

Computer Science Data Mining
Keywords

Recurring Patterns, RP-tree, Time Series