

Preface

Analysis of big data is a recent hot topic of research, and data analysis using multiple large databases is one such specific area. This area is gaining popularity, as the sources of multiple datasets are easily available due to significant technological advancements in capturing data and current requirements of our society.

We have noticed that multi-database mining is a different activity than mono-database mining. There are many challenges that one needs to tackle with. In many cases, data from multiple sources can not be moved to a single location. In this regard, the issues such as privacy-preservation, limited bandwidth offered by wireless channels, and retention of local features might play important roles. In these cases, local data are required to be mined locally.

Although mining multiple large databases poses many challenges, it offers many opportunities. Many decisions are based on multiple large databases located in different geographical regions. Such decisions would be more valid if they are based on the data distributed over the regions. First systematic studies¹ were carried out by Shichao Zhang, Xindong Wu and Chengqi Zhang. We continued investigations² on mining multiple large databases. The present book is based on the current research on knowledge discovery in multiple related databases.

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¹ Zhang S, Zhang C, Wu X (2004) Knowledge discovery in multiple databases. Springer.

² Adhikari A, Ramachandrarao P, Pedrycz W (2010) Developing multi-databases mining applications. Springer.

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