Abstract

With the advent of data mining, in many applications the automated decision making systems are used to make fair decision, but there can be discrimination hidden in the decision made by system. Discrimination refers to treating person or entity unfairly based on their membership to a certain group. Discrimination can be observed not only in social sense but also in data mining. People do not want discrimination on the basis of gender, age, nationality, race etc. and many more; therefore it is important to prevent such discrimination. Discrimination prevention mainly consists of two steps: first is discrimination discovery and second is data transformation. The data transformation follows similar approach to that of data sanitization that is used in privacy preservation. Various discrimination measures can be used to analyze its effect on quality of the original dataset.

References

Direct Discrimination Aware Data Mining

- P. N. Tan, M. Steinbach and V. Kumar, "Introduction to Data Mining." Addison-Wesley, 2006.

Index Terms

Computer Science
Data Mining
Keywords
Data sanitization  Data transformation  Discrimination  Discrimination discovery
Discrimination measures