

Abstract

Classification is an important topic in *data mining* research. Given a set of data records, each of which belongs to one of a number predefined *classes*, the *classification* problem is concerned with the discovery of *classification rules* that can allow records with unknown *class* membership to be correctly classified. Many algorithms have been developed to mine large data sets for *classification* models and they have been shown to be very effective. However, when it comes to determining the likelihood of each *classification* made, many of them are not designed with such purpose in mind. For such an application, the goal is not only to predict whether or not a subscriber would switch from one carrier to another, it is also important that the likelihood of the subscriber's doing so be predicted. Given its importance, an *Evolutionary Algorithm (EA)* called *DMEL* will be used. Furthermore, in this final project the research for time performance improvement of using *fuzzy logic* to adapting learning parameter is tested. The Result shows that *Fuzzy EA* can improve the *DMEL learning* time.

Keywords: *data mining, classification, classification rules, mine, evolutionary algorithm, dmel, fuzzy logic.*