

Agents for Predicting Online Auction Closing Prices

ABSTRACT

Online auctions are a very popular method for buying and selling items on the internet. It is very hard to speculate the winning bid of any particular auction, since it is very dynamic in that the bid prices change from time to time until the close of the auction. The closing price of an auction is not known and is dependent on several factors such as the number of auctions selling the same item, the number of bidders participating in that auction, as well as the behaviour of every individual bidder. In addition, there can be numerous auctions happening simultaneously. To be involved in an online auction, a person has to decide which item he or she will bid on, at what price, and when to bid. Generally, this preparation takes time, and has no certainty of success. If the closing price of an auction is known, then the bidders only need to determine which auction to bid on and at what price. This paper explains one of the methods used in forecasting the closing price of an auction, the Grey System Theory. This method has been known to accurately speculate values in areas where the information is insufficient. We also compare this with another forecasting method, the Time Series. Evaluations on the effectiveness of these methods in speculating the closing price in online auctions is discussed and elaborated upon.