Data Mining and Neural Networks to Determine the Financial Market Prediction

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Abstract

Predicting stock market movements has been a complex task for years by gaining the increasing interest of researchers and investors present all around the world. These have tried to get ahead of the way in order to know the levels of return and thus reduce the risk they face in investments [1]. Capital markets are areas of fundamental importance for the development of economies and their good management that favors the transition from savings to investment through the purchase and sale of shares [2]. These actions are so important that they are influenced by economic, social, political, and cultural variables. Therefore, it is reasonable to consider the value of an action in an instant not as a deterministic variable but as a random variable, considering its temporal trajectory as a stochastic process.