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Election Prediction Using Logistic Regression – Machine Learning System

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Abstract

Background: In a democratic country like INDIA, election prediction about which party will going to win become the most interested topic for the experts, journalist and normal people, as it is related for the future of big topics like economy, foreign policy, diplomacy etc. to topic like internal policy, domestic goods price, taxation etc. [1].

Objectives: Using a selection of machine learning methods and characteristics demographics of INDIAN political area and mapping, we aim to determine if party outcome of an election can be predicted from the voting pattern and demography of the corresponding constituencies [2].

Methodology: Here, Logistic regression is used, which is to understand relationship between the dependent variable and one or more independent variables by estimating probability using. It is used to model the probability of certain event existing such as pass/fail, win/loose etc. [3].

Results and discussion: We have reached an accuracy of 0.99 starting with an initial accuracy of 0.7. First, we clean the dataset and convert all the values into a numerical format. Then we create some new features using the existing ones and remove all less important features. Finally, we scale down the values into 0–1 range and train the model. Note that we could further improve the accuracy by applying cross-validation [4].

Conclusions and future work: We done this project based on Logistic regression. It works better than any other software and provide batter accuracy. In this project, we made attempt to effectively introduce the concept of election management systems already existing in the society.

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