CENTRALESUPELEC

Introduction to Machine Learning

**FINAL REPORT**

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**Abstract**

**Introduction/Motivation**

Our project aims to find a reliable way to predict the results of each candidate to the French presidential elections on a local scale. In fact, precise election results prediction has always been a challenge to solve because of the advantages it can provide to someone achieving it. Also, there are many organisations trying to predict those results by going ask people who they want to vote for, but this only works a short time before the election and it requires to go out and collect data from people one by one, which isn’t efficient and can take a long time.

Here, the goal is to only use more general data about the socio-economic and demographic situation on a local scale, which doesn’t require a long time of data collection since all this data can be found online and is free to use.

With this project, we want to answer the following question : is it possible to obtain a reliable prediction of each candidate’s proportion of votes locally by working with data engineering methods and then applying machine learning algorithms to this open source socio-economic and demographic data?

If the answer to that question is true, one could imagine lots of applications to this tool : one could sell candidates information about their future results in the places where they are not sure whether they are going to win or not, or one could even bet on ranges in which the candidate’s results are going to be and earn money with it. More simply, one could also provide the people with predictive information about the election.

**Problem Definition**

**Related Work**

**Methodology**

**Evaluation**

**Conclusion**

**References**