**Sri Lanka Presidential Election - 2019**

**Research Question:**

Which candidate will have the high possibility of winning the presidential election Sri Lanka 2019, among the Sri Lankan Gmail account users in the IT industry?

**Members:**

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  + Data Collection
  + Descriptive Analysis
  + Prediction with Bootstrap
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  + Questionnaire Preparation
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**Introduction:**

Presidential election 2019, which is trending and a blazing topic in Sri Lanka after the official announcement. There are 35 candidates have submitted their nominations and Sri Lanka's 7th executive president to be elected by more than 159,00,000 voters by voting in nearly 13000 polling stations all over the country. This project aims to conduct an opinion poll by selecting suitable ways for data gathering, analyze them, identify limitations/bias which could be there in the data-gathering phase and finally to predict the candidate who has the highest priority of winning the election.

**Results and Analysis:**

The prepared questionnaire has received 57 organic response count. There were around 12 questions in the questionnaire which can be quantitatively analyzed and altogether there were 15 questions. The questionnaire can be accessed here [<https://docs.google.com/forms/d/1tF67qVmmnyqYk-ATqjNG1OGxW3GwAtCd9nipzpwZLZo/edit>]

Almost all respondents have education level at lease GCE A/L, out of those around 64% are graduate or postgraduate qualified personnel. Also 78.9% of respondents are Private Sector Employees. According to those results we can identify most of the respondents are well educated people. Therefore this study will not represent all the sectors in Sri Lanka, but educated and mostly private sector employees opinion will be reflected. Since the questionnaire was circulated among IT sector employees, the results will represent mostly private IT sector employees.

All the respondents are in age between 21-40. Also 84.2% of respondents are male. All the respondents are Sinhalese and 8.8% are first time voters. Geographically 34.5% of respondents are from Colombo district.

Out of the total respondents 89.5% are willing to vote in the upcoming presidential election. 82.7% of respondents says that SLPP candidate will win the upcoming presidential election in there area, But 79.2% of respondents are willing to SLPP candidate. There is a small portion of uncertainty in the given answers.

We did bootstrapping the experiment to get a confidence interval. 1000 replicates are generated for the experiment. By doing so we could be able to say from 95% confidence interval Mr. Gotabaya Rajapaksha will get 66.95% to 89.75% of votes from IT sector employees in this presidential election.

Then we conducted the experiment only with Colombo district residents. There we could be able to say from 95% confidence interval Mr. Gotabaya Rajapaksha will get 47.84% to 89.75% percentage of votes from IT sector employees from Colombo District in this presidential election.

**Conclusion:**

After conducting a series of analysis, such as descriptive analysis, and techniques it is possible to conclude that the candidate appointed by Sri Lanka Podujana Peramuna (SLPP) will get the [majority vote](https://github.com/mojith/PresidentialElection2019Prediction/blob/master/src/Predict-Sri-Lankan-president-2019.ipynb) from the target audience.

**Discussion:**

One of the major limitations of this conducted poll is that the number of participants. And it can be further elaborated under the below-mentioned sections.

* 57 responses – Received only 57 responses for the poll. Since both the target audience and the sample size is very limited compared with the population, it is difficult to analyze and infer the results.
* Gmail account users – Since we have created a Google form, form access is limited to Gmail users. Even though it is decided to conduct an online survey, it could be implemented using web application such as [LimeSurvey](https://sparkwinn5.limequery.com/)/[SurveyMonkey](https://www.surveymonkey.com/) instead of Google form where it will remove the barrier of limiting only to Gmail users.
* IT employees – The poll has shared among only the IT sector employees (nearly 10 companies)