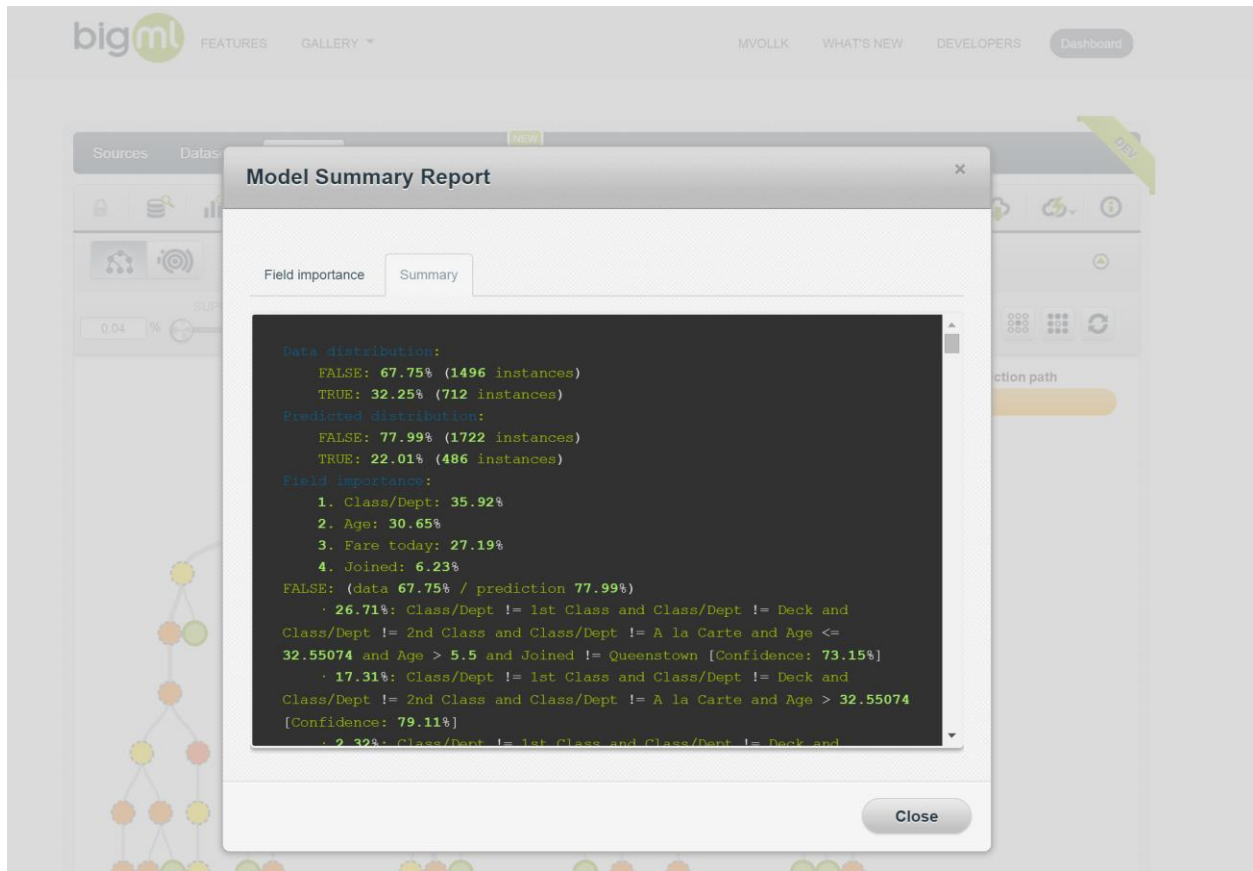


Part 1

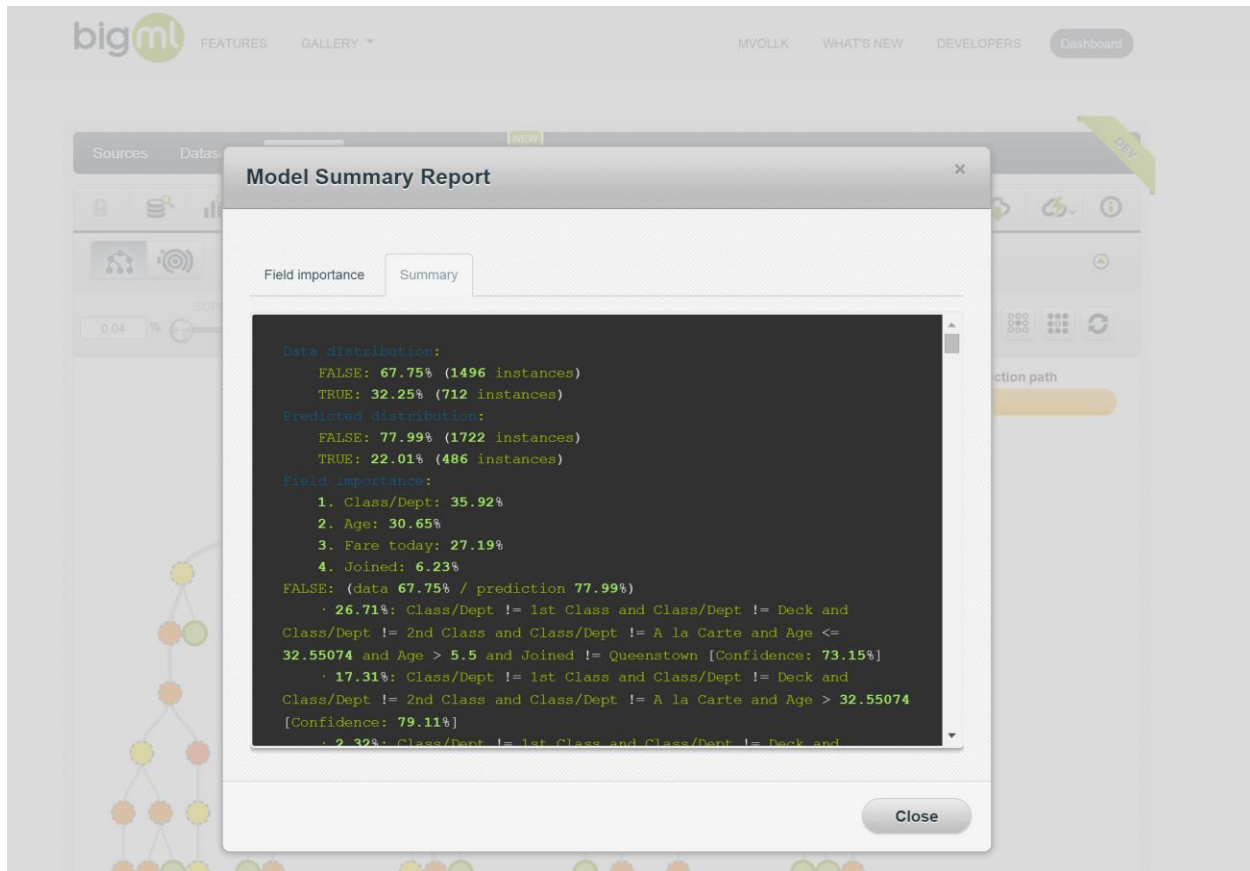
1.1

712 survived



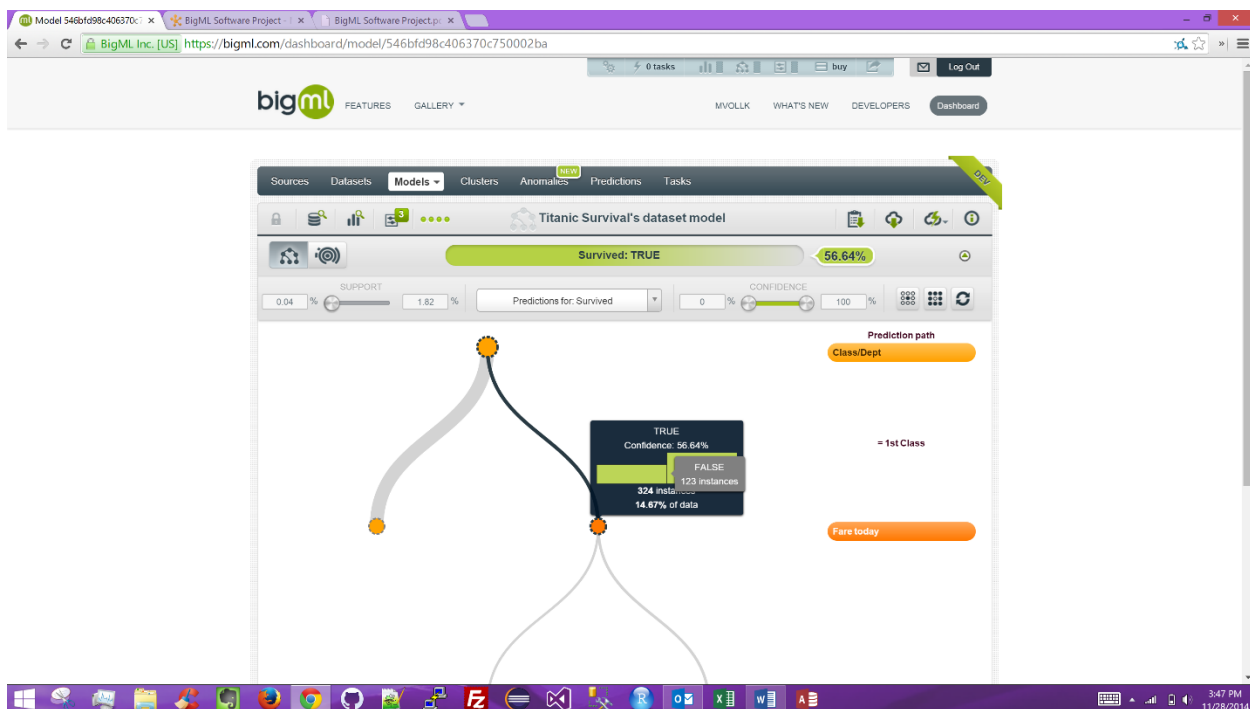
1.2

67.75% survived



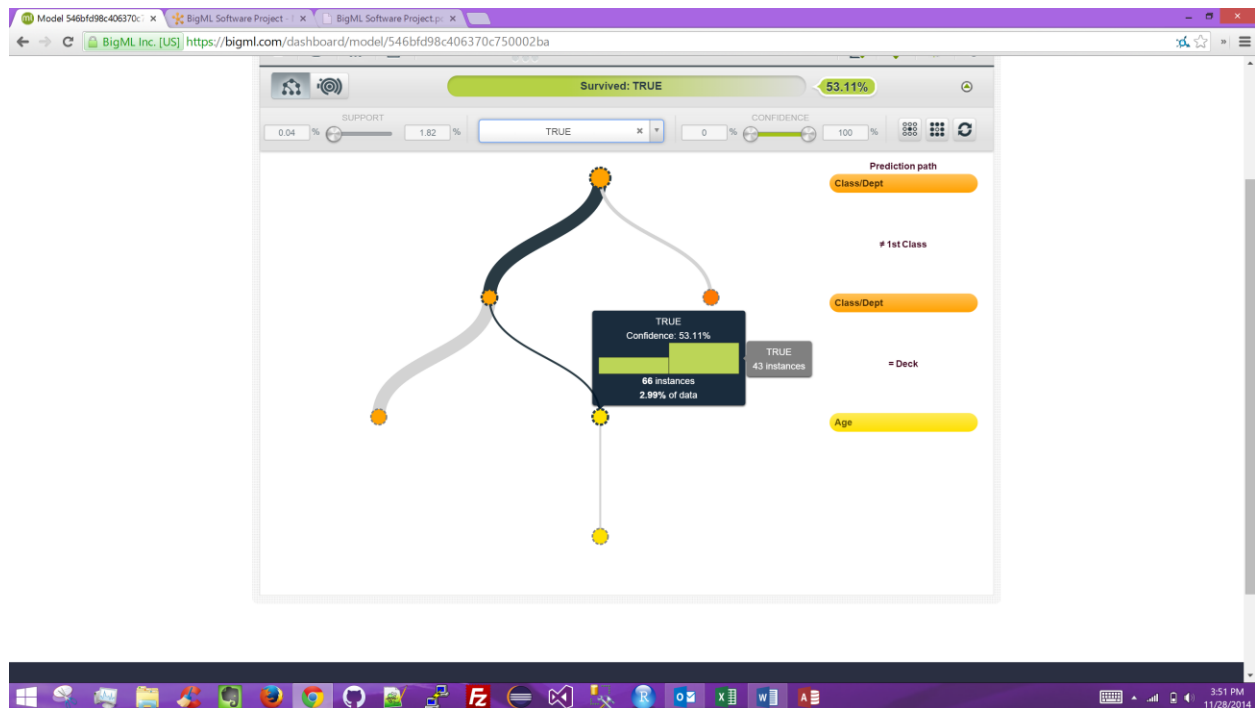
First class

123 people died, 201 survived. So $201/(123+201) = 62.04\%$



Deck

43 people on deck survived. 23 died. So $43/66 = 65.12\%$



1.3

a) Class/Dept = 3rd class, Age = 50.16, Joined = Queenstown

$$1 - 79.11\% = 20.89\%$$

The screenshot shows the BigML Predictions interface for a model named 'First Class Survival'. The prediction result is 'Survived: FALSE' with a confidence of 79.11%. The input fields are set as follows: Class/Dept is '3rd Class', Age is 50.16, Fare today is 24719, and Joined is 'Queenstown'. The 'Missing strategy' is set to 'All input fields'. A 'Save' button is visible at the bottom right of the prediction panel.

b) Class/Dept = Deck, Age = 21.12

$1 - 20.65\% = 79.35\%$

The screenshot shows the BigML Predictions interface for the same model 'First Class Survival'. The prediction result is 'Survived: FALSE' with a confidence of 20.65%. The input fields are updated: Class/Dept is 'Deck', Age is 21.12, Fare today is 24719, and Joined is 'Queenstown'. The 'Missing strategy' remains 'All input fields'. A 'Save' button is visible at the bottom right of the prediction panel.

c) Class/Dept = 1st class, Fare = 49,438, Age = 39.6

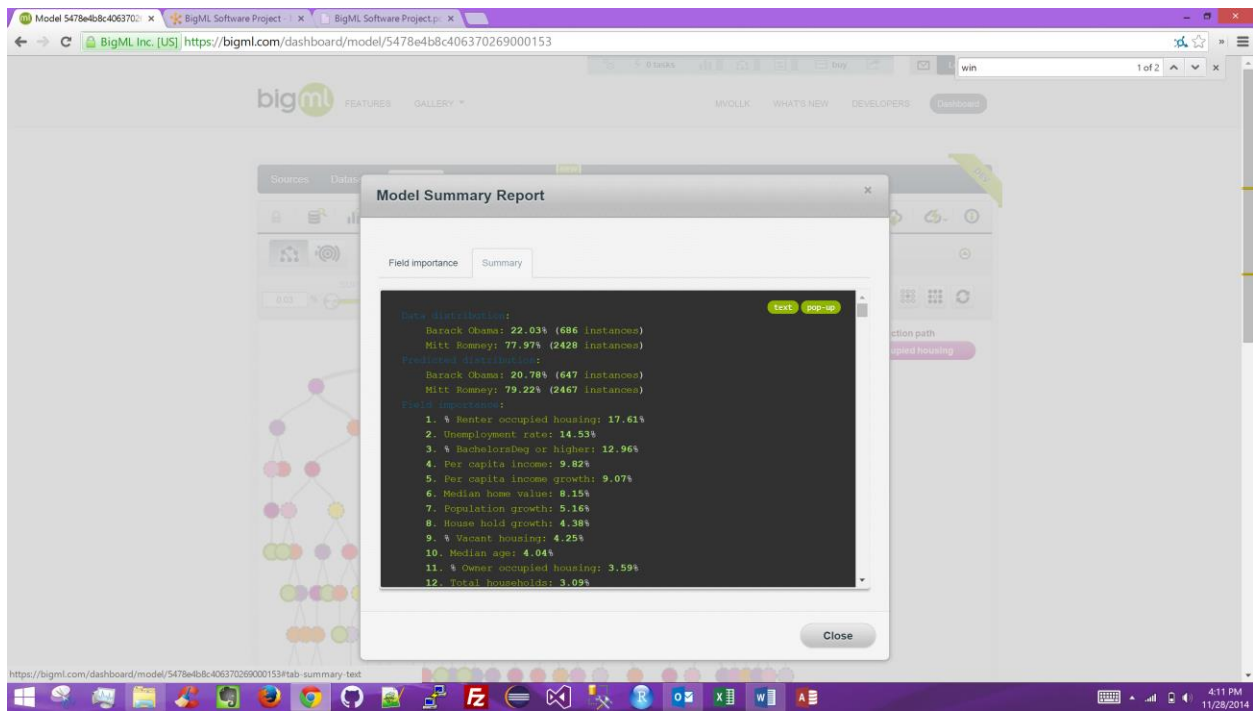
$$1 - 52.30\% = 47.70\%$$

The screenshot shows the BigML web interface for a prediction task titled "First Class Survival". The prediction result is "Survived: TRUE" with a confidence of 52.30%. The interface includes sliders for input variables: Class/Dept (set to 1st Class), Age (set to 39.6), Fare today (set to 49438), and Joined (set to Queenstown). A "Save" button is visible for saving the prediction name.

Part 2

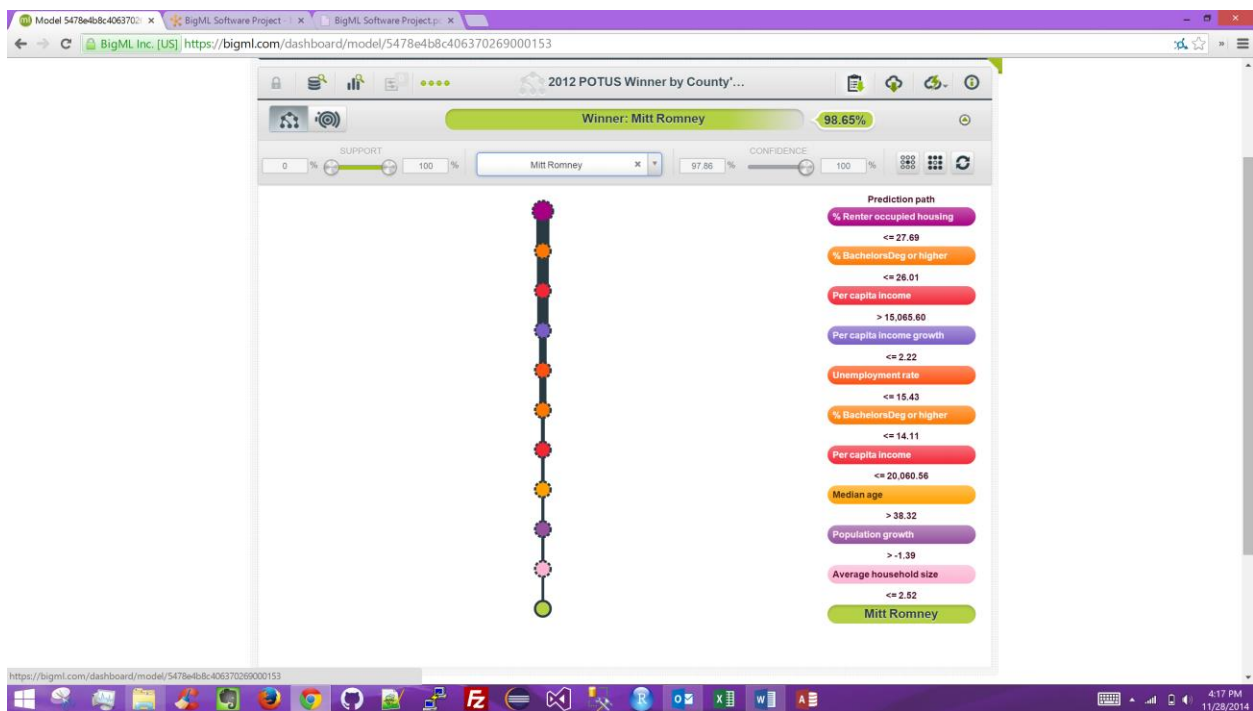
2.1

The single variable that best predicts whether a person voted for Obama is Renter Occupied Housing

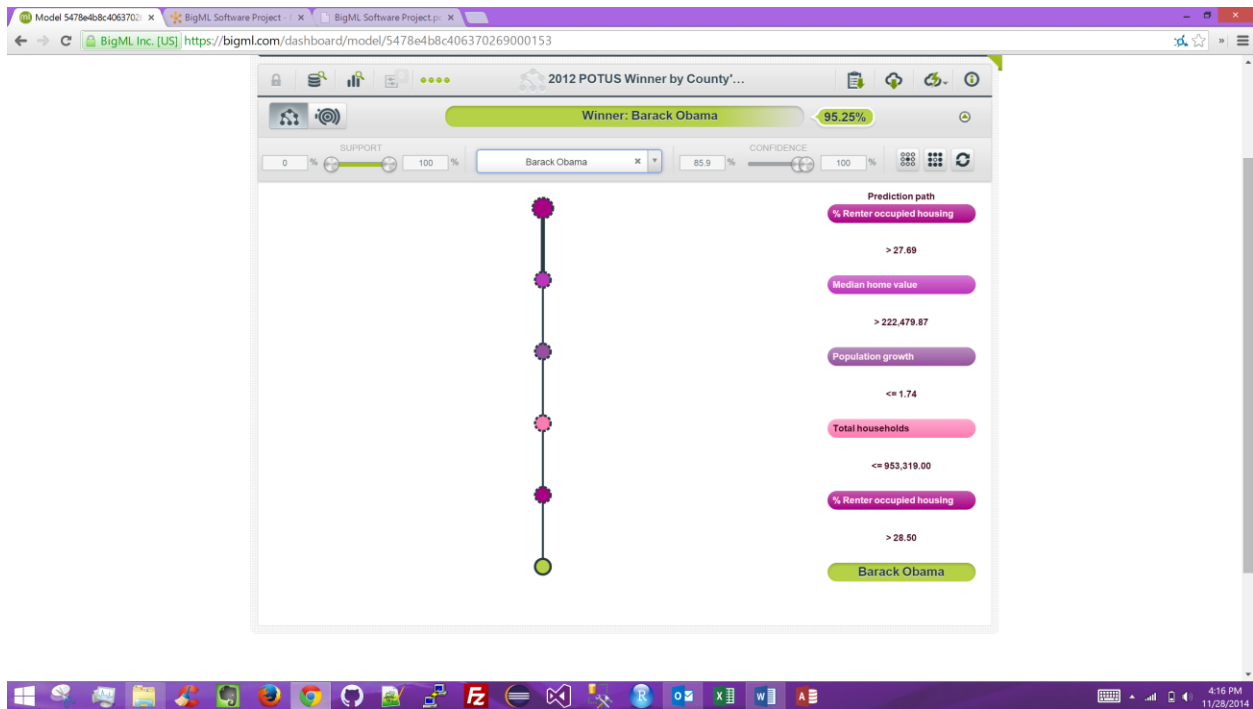


2.2

Romney:

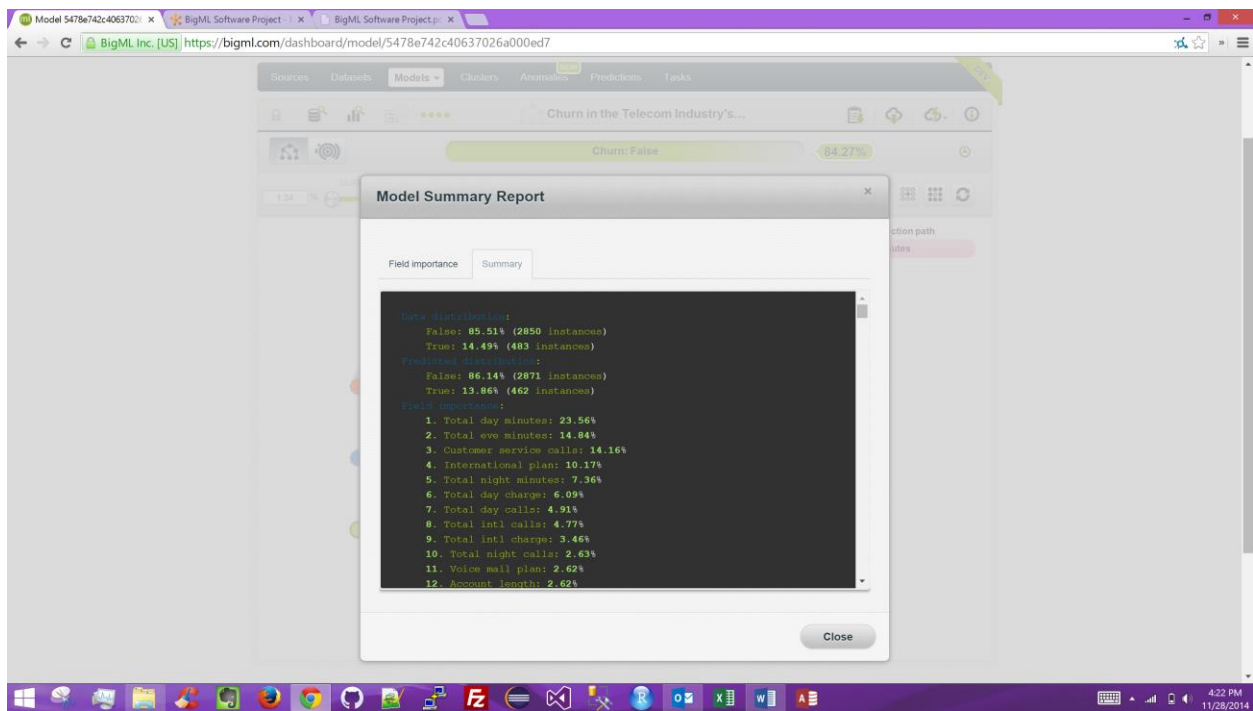


Obama:



Part 3

Total Day Minutes is the single biggest predictor of churn

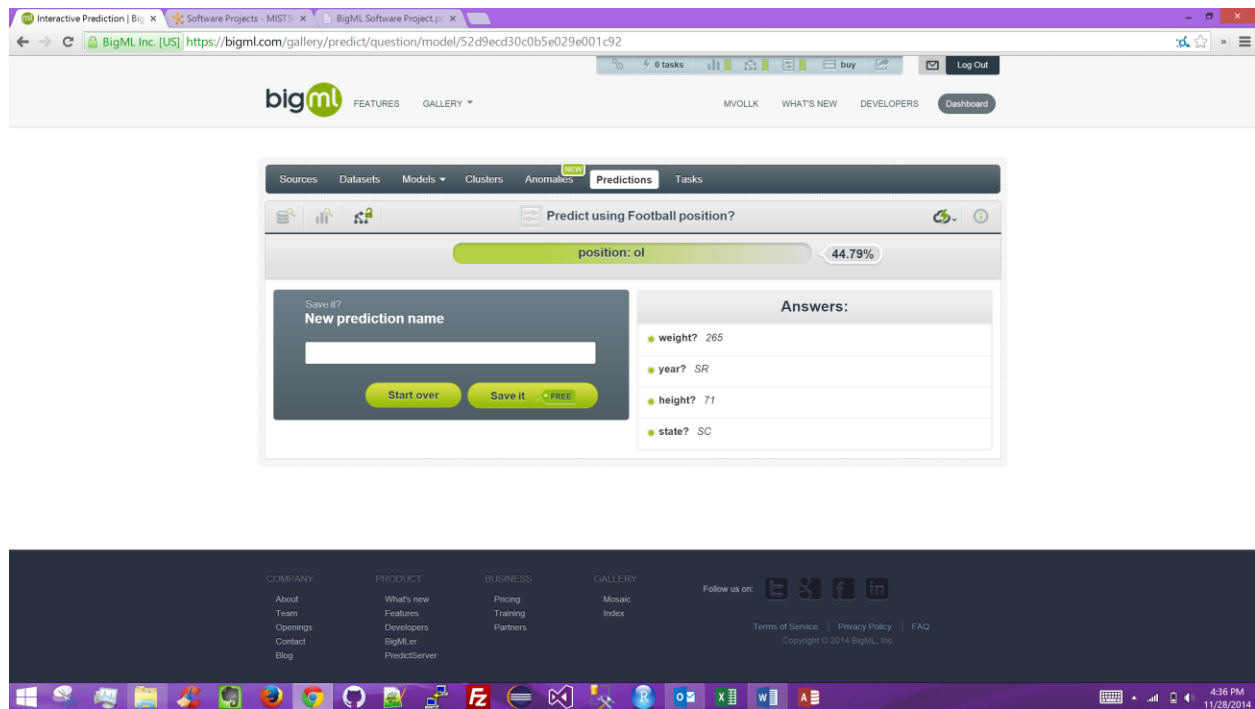


I would include all of the variables generated by BigML. The worst type of information is unknown unknown information. I would rather keep everything just in case. Data storage and processing is so cheap now that it wouldn't really even make a cost difference.

1. Total day minutes
2. Total eve minutes
3. Customer service calls
4. International plan
5. Total night minutes
6. Total day charge
7. Total day calls
8. Total intl calls
9. Total intl charge
10. Total night calls
11. Voice mail plan
12. Account length
13. Total eve calls
14. Area code
15. Number vmail messages

Part 4

I have a 44.79% chance of being an ol



Part 5

Select the Sports and Games filter.

Choose:

Other

Then select the Playmate of the Year Bust model

Fill in your information using the prediction feature

What bust would you need to win it? With what percentage of confidence.

I am off of the charts for variables of weight, waist and hips.

I would need a 38.00 bust with 2.48% confidence

The screenshot displays the BigML web application interface. The browser's address bar shows the URL <https://bigml.com/gallery/predict/model/52c0cf30c0b5e6fc9000128>. The BigML logo and navigation links (FEATURES, GALLERY, M/VOLLK, WHAT'S NEW, DEVELOPERS, Dashboard) are visible at the top.

The main interface is titled "Predict using Playmate of the Year b...". It features a "Bust: 38.00" prediction result and a "2.48" score. Below this, the "Missing strategy" is set to "All input fields".

The input fields are organized into two columns:

- Weight:** Range 92.50 to 149.50, current value 149.5, 61.54% completion.
- Waist:** Range 18.50 to 27.50, current value 27.5, 32.90% completion.
- Hips:** Range 24.25 to 40.75, current value 40.75, 6.56% completion.
- Height:** Range 59.75 to 73.25, current value 71, 100% completion.
- Age at PMOY:** Range 14 to 36, current value 23, 100% completion.

At the bottom, there is a "New prediction name" field with the text "Prediction for Bust" and a "Save" button labeled "FREE".

The Windows taskbar at the bottom shows the system clock as 4:48 PM on 11/28/2014.