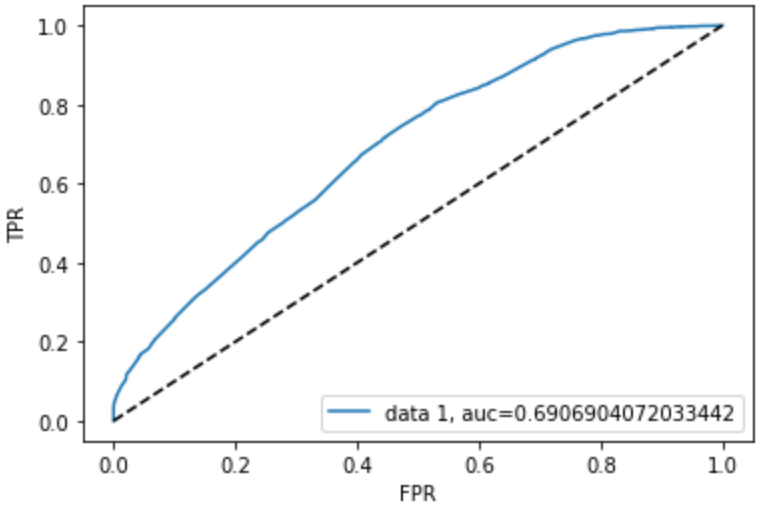
Take Home Challenge - Relax Inc. Submission

Based on the analysis presented in the accompanying Jupyter notebook, the factors predicting user adoption are the following:

- If a user is subscribed to company emails (i.e. 'opted_in_to_mailing_list' column)
- If a user is subscribed to marketing drip campaigns (i.e. 'enabled_for_marketing_drip' column)
- User's email service(i.e. 'domain' column)
- How the user registered for the service(i.e. 'creation_source' column)
- User's employer(i.e. 'org_id' column)
- If a user was invited to try the service (i.e. 'IsInvited' column)

These factors were determined by first answering the question, "given the data columns, which are likely to **cause** a user to adopt this platform?" Obviously, columns such as 'name' and 'object_id' definitely do not contribute to user adoption, but the columns listed previously are probable causes. These suspected columns were then modelled by implementing a hyperparameter-tuned Random Forest Classifier which produced a model score of 0.635, an AUC of 0.691, and the following ROC Curve:



Even though this model does not produce enough predictive power, further analysis can test adding/removing factors or using different binary classification models (such as Logistic Regression or Decision Trees).