Data Science Take Home Project

Expected Time Commitment: 3-4 hours

Background:
Brigit provides customers access to interest-free advances in order to bridge gaps between when their bills are due and when their paychecks come in. Each customer that signs up with us links their bank account to our system, and from there we can see every transaction in/out of their account as well as their historical balance trends.

In order to underwrite our customers for these advances we use a variety of information provided by them (eg. their income and pay schedule) which we verify against their bank account data, as well as information we infer from their bank accounts (ie. their recurring bills, spending patterns, and inflows/outflows).

Inputs:
You're provided with a couple of files which represents a bunch of loans related to subset of hypothetical Brigit users and the information (features) we had available at the time that they requested an advance.

We'd like you to use this data to build a prediction model which predicts a probability of default for each user. There's a data dictionary provided with the data which explains the features you have available.

Goal:

- Produce a model which does a good job of classifying defaulters/non-defaulters

Output:

- Provide us with a model and the code to produce it. Notes within the code would be greatly appreciated.
- Write up a light report on how you came up with your model, and your findings about it's effectiveness.

Other notes/suggestions:

- You can use whatever programming language/tools you'd like.
- You're also allowed to use whatever modeling techniques you'd like, but you should be able to explain your decisions as to why you think the model is a good fit.
- Beware of overfitting. We recommend setting up a test/train set or using cross validation.
- You do not need to make your output report pretty, but it should be understandable, so focus on communication, no need to waste your time on presentation.

If you have any questions or requests, please feel free to reach out to Nick (nick@hellobrigit.com) and Hamel (hamel@hellobrigit.com).