



Risk Exercise for Candidates

Introduction

Thank you for taking the time to interview with us so far — we're excited about your interest in a role on our team and would like to invite you back for another discussion. In advance of our next meeting, we'd like to ask you to look at a raw dataset and perform a small analytical project so that we can see how you work. We'll ask you to make a small, informal presentation of your work at our next meeting

Instructions

- Please submit the results of the exercise at your earliest convenience. Following the successful submission, the recruiter will work with you one-on-one to arrange a second interview time that is convenient for everyone.
- The dataset is all about predicting whether or not a consumer will repay their debt to a lender.
 - Of course we don't expect you to already be an expert on how lending works or what industry-specific terms mean, so if you have any questions at all, just let us know!
- The raw dataset is available on Kaggle
 - We're only borrowing the dataset from Kaggle, there is no need to actually submit anything to Kaggle itself
 - Access it here: <https://www.kaggle.com/c/GiveMeSomeCredit>
 - If you don't have a Kaggle account and don't want to create one, no worries, just let us know and we'll get the file to you directly
- Some general questions to get you thinking in the right direction:
 - What can you tell us about the population of consumers?
 - Is there anything interesting about the predictors?
 - What things can be used to predict that consumer might not pay?
 - What are some simple recommendations you can make to manage these applicants?



Notes

- While candidates are expected to train a machine learning model, there is no need to spend too much time building something perfectly hypertuned and production-worthy – but do please be prepared to discuss any potential shortcomings and what additional steps you would take if this was for a real business application
- Building good models is only one part of managing risk – understanding how to apply the results of the model to various business scenarios in order to optimize for economics other factors is easy.
 - In the case of this assignment, the full business context is not provided, but it will nevertheless be useful for candidates to imagine what the business that generated this raw data might really look like.
 - What key information would need to be known before devising a strategy on top of this model? What business strategies would the candidate think are advisable given certain key assumptions?
- It is important that you provide explanations of your work (i.e. why you choose to do things with the data set that you do). You are welcome to present verbally during the interview time, but your output should be a complete representation of your analysis
- It would be great if you could store any code you produce in a place that's easy to review (Github or BitBucket are preferred, but sending files directly is OK too)
- You can choose how to present your results. Please let us know what you'd need to present your findings (laptop with Powerpoint, R, Python notebook, etc)
- If you have any questions whatsoever, please feel free to reach out to us directly or via the recruiter!