

## Data Science assignment

**Goal:** demonstrate ability to understand the business problem, who are we solving it for and why. Articulate the approach and demonstrate the ability to quickly build a solution prototype.

**Problem statement:** Design & build a machine/deep learning application to summarize & rate the profiles received for Job Opening to improve the resume screening efficiency by xxx%.

The application should help recruiters automate the task of screening candidates.

The system should also be able to "rate" the applicants based on the contents of the resume, for example somebody with a master degree and higher experience and higher GPA etc. should be rated higher. You are free to choose your own criterion for rating and the rating scheme (1-5, or 1-10 etc.). You should be able to find a training set for this problem easily on the internet, if you don't please get back to us, we can help you with that. You can assume the document to be in .pdf or .docx format (you can use tools like Apache Tika to extract text from these documents).

The summary should consist of the following information (of course not all resumes will have all the information).

- 1. Name of the candidate | City | Phone no | E-mail addresses
- 2. Companies worked | Colleges/schools | Experience | Skills
- 3. Rating as assigned by the system

Once you are done training the model, build a simple command line tool that takes a new resume as input and display the summarized information. You should be able to explain the choice of your algo and approach, and demonstrate the accuracy vs trade-offs.

## Deliverables

- 1. Write a Product Requirement Doc (PRD) or a RFC for the above problem. You can use either of the formats you are familiar with. Sample formats  $\underline{PRD}$  &  $\underline{RFC}$
- 2. Implement the solution as described below. You can use github to share the solution & PRD. Make sure you commit your code at regular intervals, don't push all the code as a single commit.
- 3. Running setup to demo during the interview.

## Please keep these considerations in mind as you solve the problem:

- 1. You are free to choose any tool/framework of your choice.
- 2. You can refer and copy code samples on the web, there is no restriction on that, but you should be able to explain whatever you have done. Simply arriving at an outcome is not sufficient.
- 3. Please feel free to reach out to us on mail or phone if you need more clarification on solving the challenge. In fact we encourage you to do that, as that gives us visibility into your thought process.