#### NOTES ON GLASSDOOR EMPLOYEE ATTRITION STUDY

Abstract. We ...

## 1. Introduction and Overview

- high level summary
- literature review
- discuss why data is diff to find here
- organization of article

#### 2. Data Description and Summary

In this section we ...

- 2.1. Data Description.
- 2.2. Data Summary Insights.
  - 3. Towards an Attrition Model
- 3.1. Variable Selection and Feature Engineering.
- 3.2. Model Creation.
- 3.3. Performance Comparison.
  - 4. Conclusions and Extensions
- 4.1. Review and Limitations.
- 4.2. Future Extensions. Here we describe several ideas to pursue as part of this study

Mention limitations here (same as in glassdoor article and others that we find) ... then mention that our extensions will overcome these limitations

- company specific analytics - linked in, full glassdoor dataset - outlier determination may serve as a glassdoor fake review filter

## References

[1] Smart, Morgan and Chamberlain, Andrew (2016). Why Do Workers Quit? The Factors that Predict Employee Turnover. Glassdoor Research Report Whitepaper.

# 5. IDEAS TO PURSUE FOR THIS PROJECT

- (1) Old to new industry ... matrix here
- (2) Let's focus on Leaving a company, not just different role in same company
- (3) Look at rankings from old company to new one; what can we say overall about the characteristics of these companies? What factors did we see the most signi change in? Make scatter plots/hists here
- (4) What other summary statistics are relevant that go beyond what is already in the glassdoor article?
- (5) Do a brief literature review. What has been done in this area already? Summarize Glass-door as part of this ... describe the uniqueness of this dataset. Mention it would be of interest to expand ... mine LinkedIn as well to do a more thorough study later.
- (6) do reasons vary by length of job???
- (7) Look at people who made a major change (e.g. shifted geographic regions. ... more than 500 miles away ... is motivation any different for these people?)

- (8) Look at how old vs new ranking variable scatter plots differ from the y=x line, e.g. if employees change, which variables to we find also change significantly? Do some change always in the upwards direction? Linear reg. essentially tries to understand to what extent is this line differs from 1, e.g. if it is 1 for a given variable, then this variable has no influence ... can we develop a better variable influence measure here?
- (9) Look at people who switched industries ... any different motivation here?
- (10) One interesting feature is that employees seldom seem to stay at a company that has the same size as their old one. Lots of shirts from large to small or vice versa. Perhaps make this more quantitative?
- (11) check if job-len corresponds to start, end date difference
- (12) Any info associated with geographic studies? Large vs small cities?
- (13) patterns that stem from either age or employment tenure?
- (14) binary model classifer, ROC curve etc.
- (15) impl their original regression model ... test
- (16) industry specific studies
- (17) Distribution of dates that changes were made ... do we see a pattern on times of the year that moves occurred