



TURNOVER ANALYSIS

YOU CAN'T FIRE ME, I QUIT!

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BY PREDICTING THE PROBABILITY EMPLOYEES WILL QUIT, THE APP HELPS TO ACHIEVE

- Higher retention rate
- Better understanding of the factors that cause turnover
- Longterm competitive advantage

The image features a panoramic view of the Chicago skyline, including prominent skyscrapers like the Willis Tower. A solid green rectangular overlay covers the middle portion of the image, serving as a background for the text.

DEMO

DATASET FROM KAGGLE

- 15,000 observations
- 14,000 train set
- 1,000 test set
- Response: binary indicating whether the employee quit or not

MAIN PREDICTORS

- Satisfaction Level
- Last Evaluation
- Salary
- Binary for promotion in last 5 years
- Tenure
- Average monthly hours

RANDOM FOREST CLASSIFIER

- False negatives (failing to predict that somebody will quit) are more costly than false positives
- Recall is the main measure of interest

**TEST SET
ACCURACY**

98%

**TEST SET
RECALL**

95%

1

HIGH PERFORMING EMPLOYEES QUIT MORE

- Average Evaluation: **0.72**
- Average Evaluation of 10 most-likely to quit employees: **0.87**

2

HIGH PROBABILITY OF QUITTING CAUSED BY:

- Low Satisfaction
- High workload
- High Tenure



THANK YOU

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