TURNOVER ANALYSIS

YOU CAN'T FIRE ME, I QUIT!

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PEOPLE ARE COMPANIES' MOST IMPORTANT ASSETS

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



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

- Recall is the main measure of interest
- A false negative is more costly than a false positive

TEST SET ACCURACY

98%

TEST SET RECALL

95%



HIGH PERFORMING EMPLOYEES QUIT MORE

- Average Evaluation in historical data: 0.72
- Average Evaluation of 10 most-likely to quit current employees: 0.87

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MAIN CAUSES OF HIGH TURNOVER

- Low Satisfaction
- High Tenure
- High workload

THANK YOU

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