# Predicting employee attrition for IBM



Julia Müller Data Scientist

## Situation & Project Goal

#### Problem

- Tough recruiting market
- **High** employee turnover
- Resignations come at surprise

#### Solution

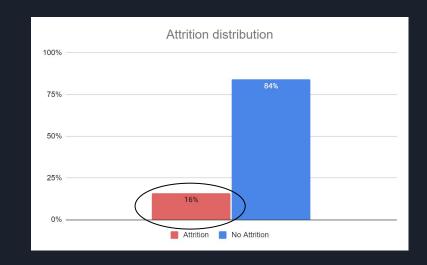
- **Identify** employees who might want to **leave** the company
- Find out **factors** that drive **resignations**
- Enable strategic HR interventions

## The data

• Internal data with > 1400 employees

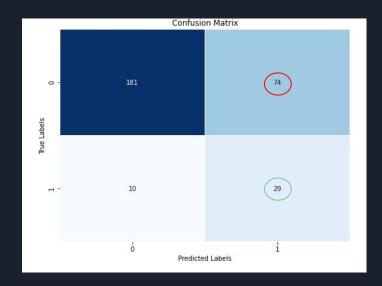
#### • Attrition yes vs. no

- Information about
  - Demographics
  - **Position**
  - History in company
  - Satisfaction scores
  - Performance
  - Educational background



## Method & Evaluation

- Classification task (attrition yes vs. no)
- Random Forest Classifier
- Focus on predicting the actual leavers → **Recall**
- Accept false positives
- Final model has a recall of 0.71



# Limitations & next steps

• Model identifies too many non-leavers

Gather more data

• Design review process

• Review HR policies



## Contact info

Julia Müller

julia.mueller8961@gmail.com

LinkedIn Profile

GitHub Profile