Smart HR

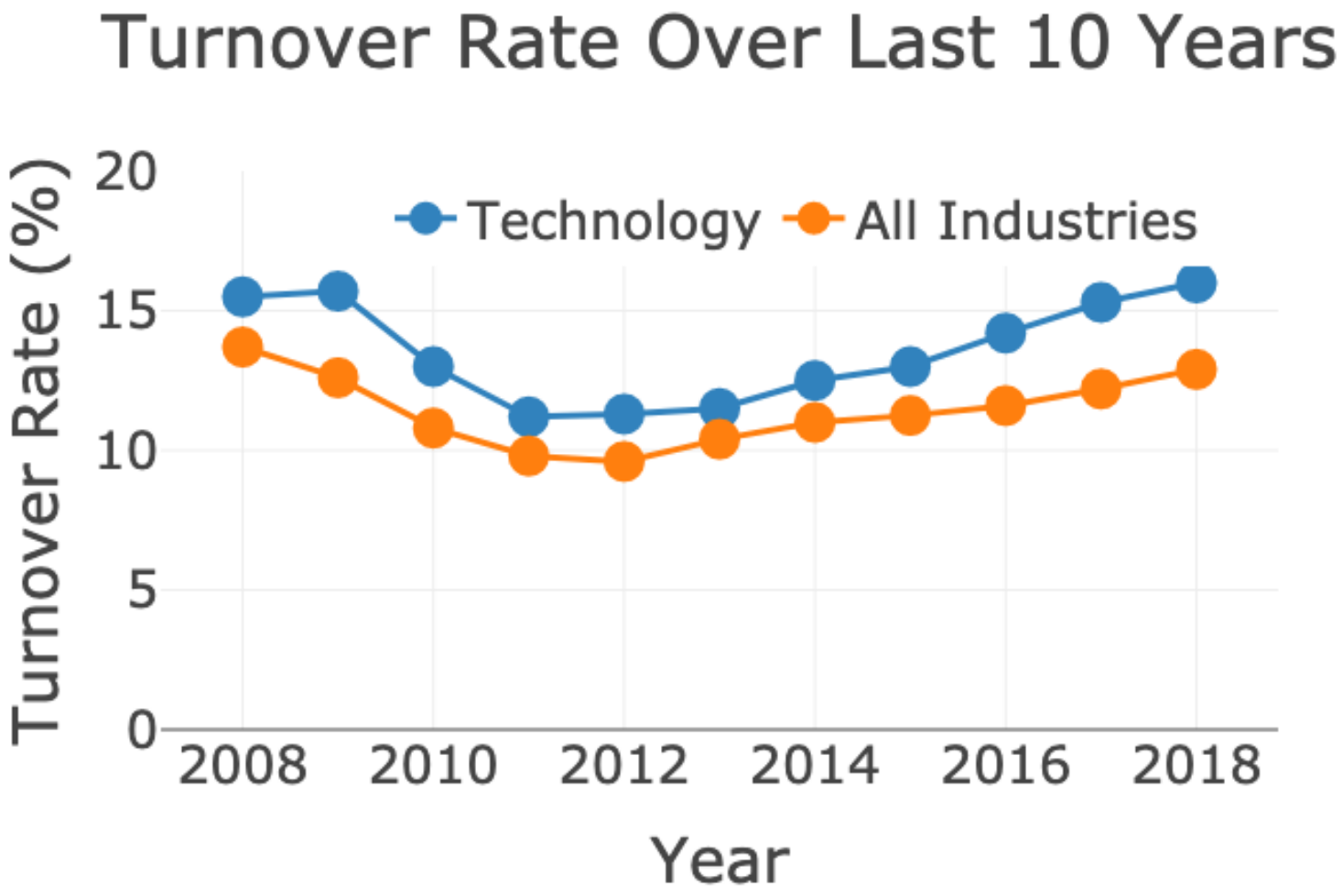
— Reveal the true drivers behind employee attrition

Yuan Wang

INSIGHT

Demo https://smart-hr-app.herokuapp.com/

Background

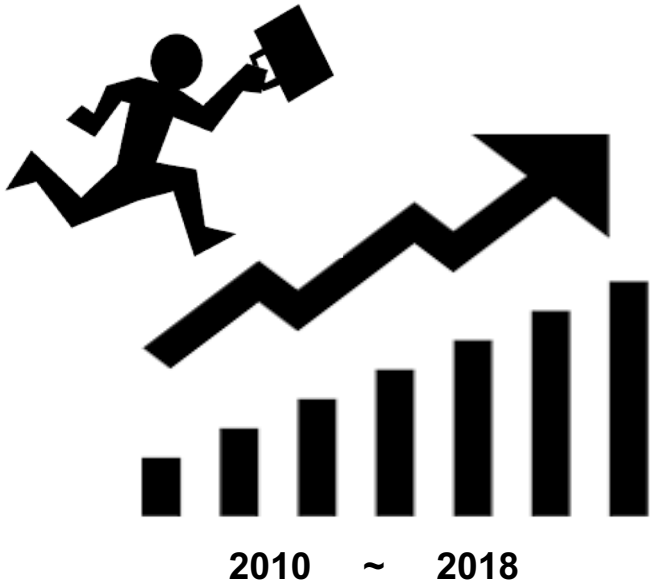

Turnover Rate Over Last 10 Years
Technology
All Industries
Turnover Rate (%)
20
15
10
5
0
2008
2010
2012
2014
2016
2018
Year

Motivation

Hiring is **EXPENSIVE**!

Employee attrition will

- *Lower firm productivity*
- *Cost time and $$$*



Replacement Cost

$ 5,000 — $ 80,000

HR team care about employee attrition!

Project Goal

Analysis Pipeline

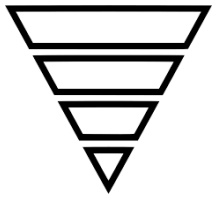
Dataset → Model → Classifier → Output

Company Information

Employee Profile

Workplace Survey

Labor Market



Feature Importance Ranking

Prediction

Yes

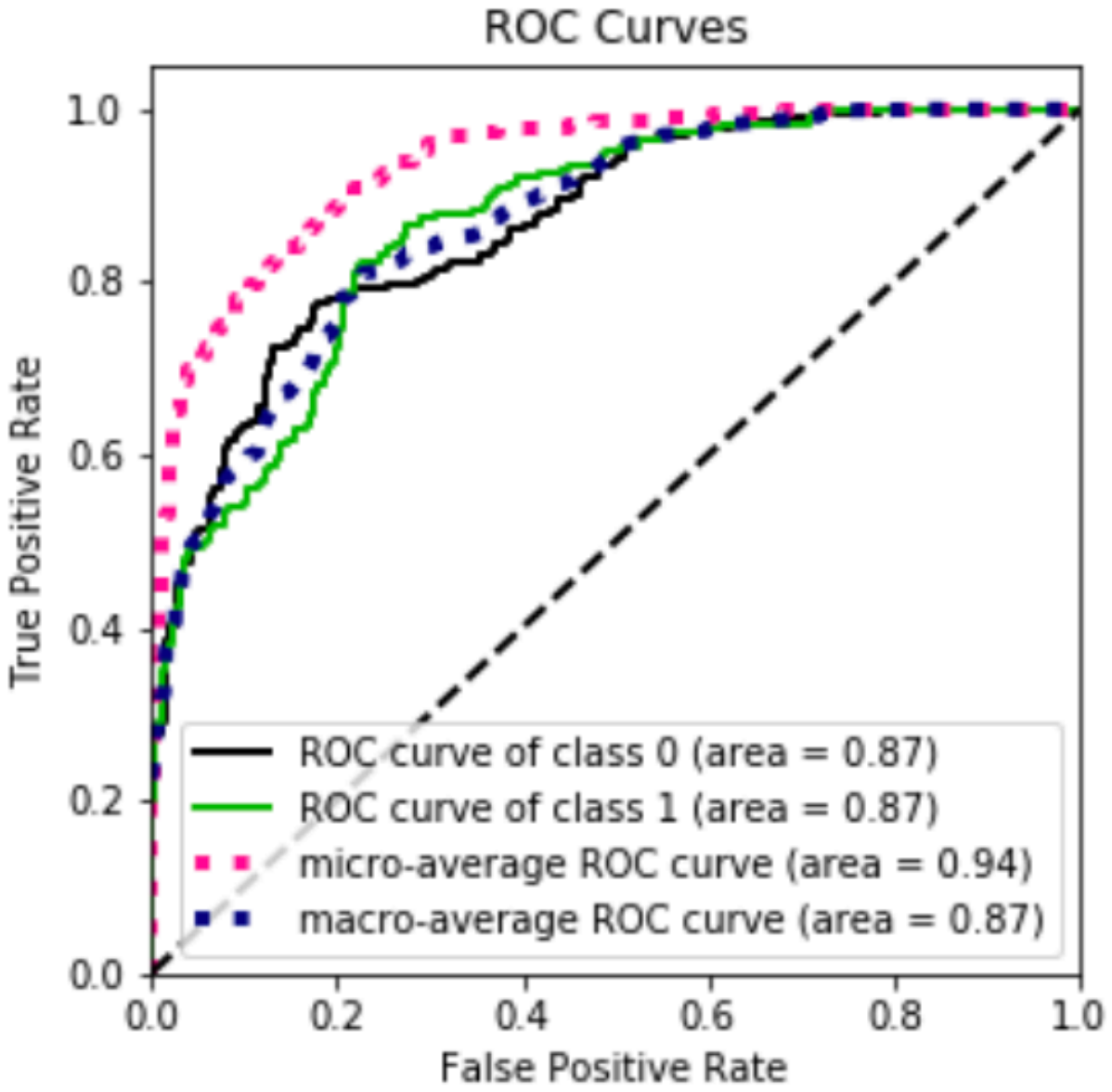
No

Local Interpretation

Demo

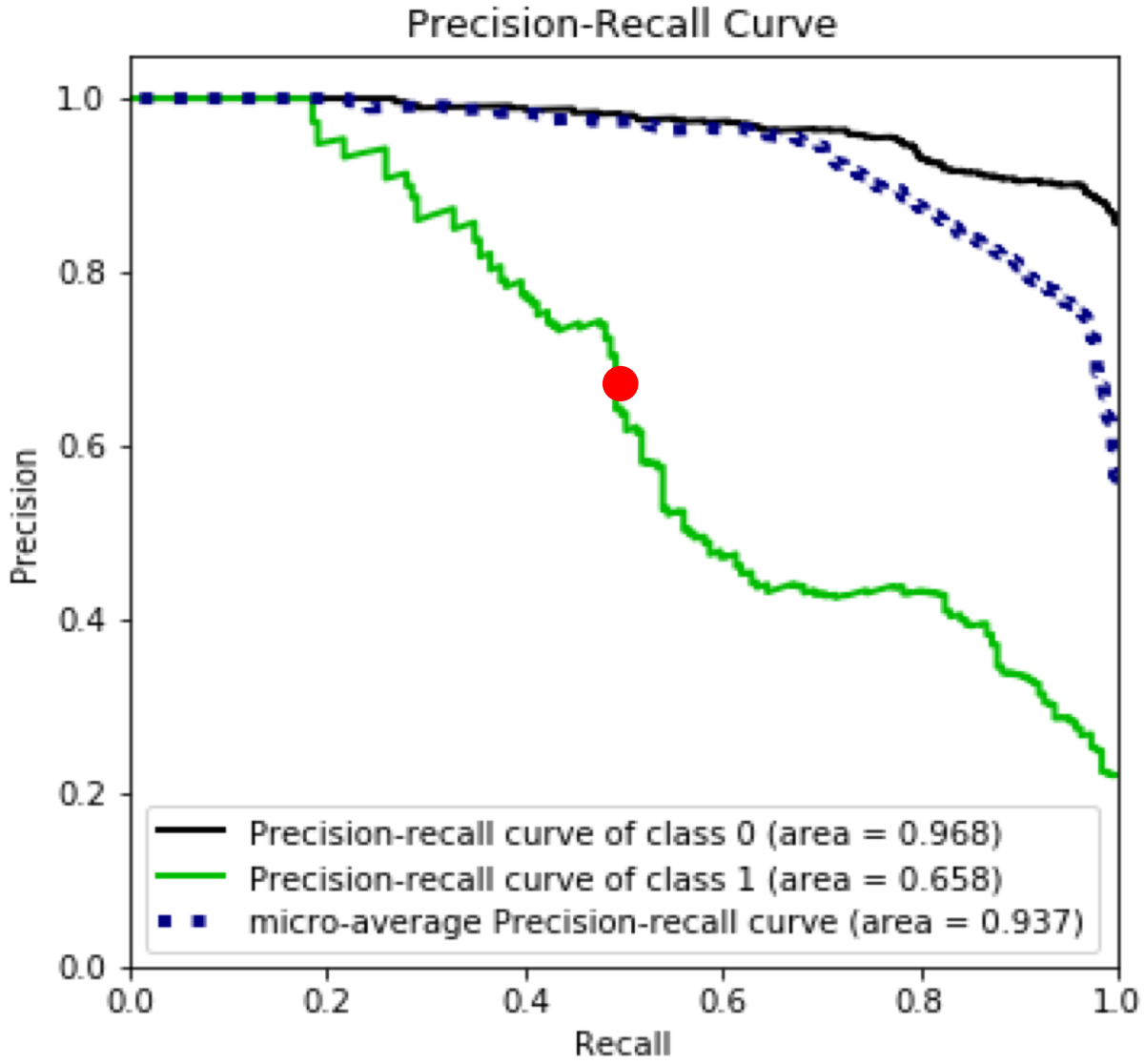
Adaptive Boosting Classification Model

Model Performance



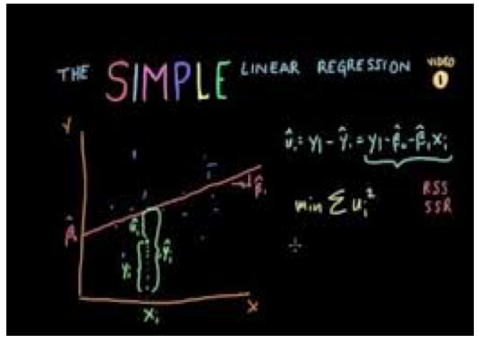
Adaptive Boosting Classification Model

Model Performance

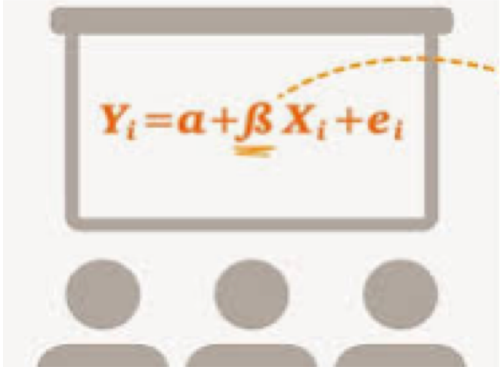


Yuan Wang

Ph.D. in Applied Econometrics



M.S. in Quantitative Economics



Experience in business activity evaluation, causal effect analysis