



VACCINATION STATUS PREDICTION

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BACKGROUND

- COVID Era Started
- GOAT city wants to know if the survey is effective in predicting vaccination status.

BUSINESS PROBLEM

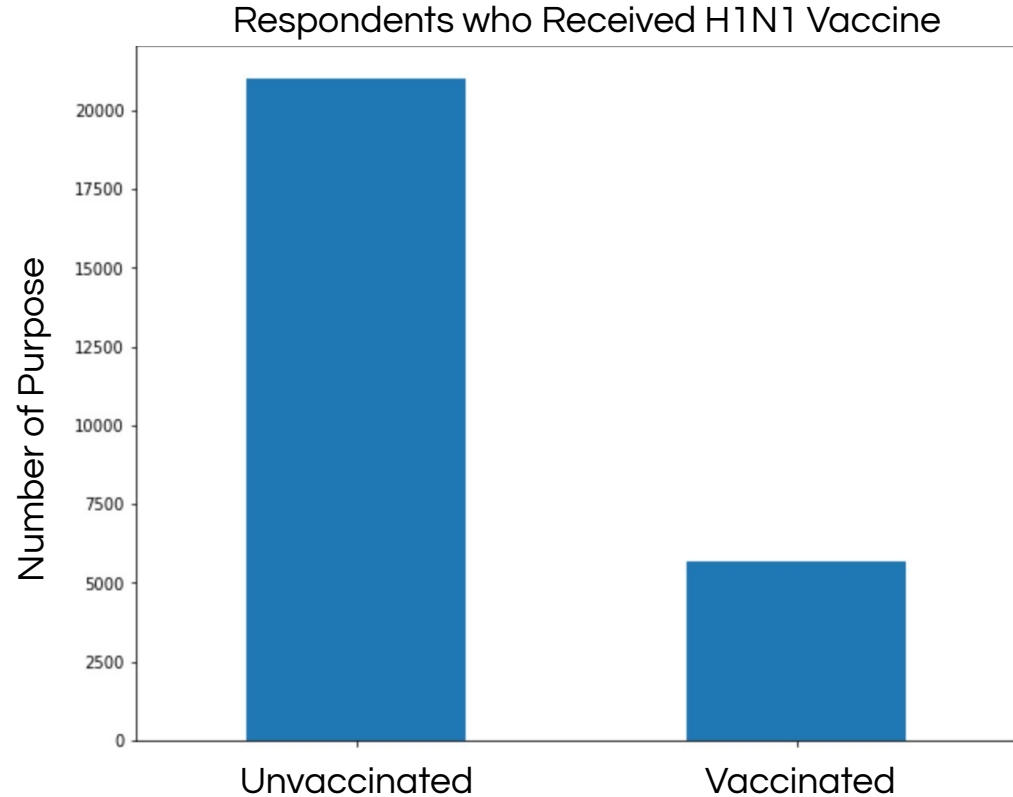
Was the H1N1 survey effective in predicting vaccination status?

DATA UNDERSTANDING

- National 2009 H1N1 Flu Survey ¹
 - Vaccination Status of Respondent
- False Positive
 - Risking \$\$\$
- False Negative
 - Risking \$\$\$ and Life

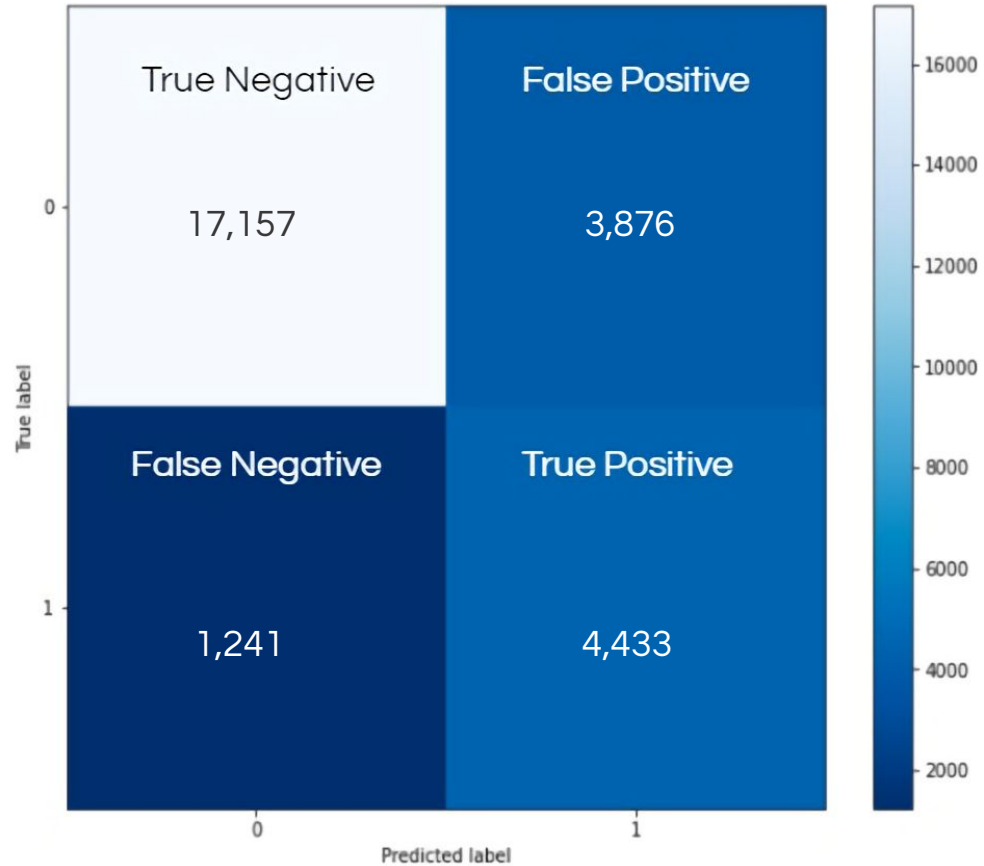
DATA PREPARATION

- Encoded Values
- Imbalanced Data



FINAL MODEL

- Decision Tree Based
 - Specifically designed for survey data
- Accuracy: ~80%





VACCINATION

Actual Dose

5674

Predicted Dose

8309

EXPECTED COST

Actual Cost

\$45,932

Predicted Cost

\$66,472

THANK YOU!

Project Github :

https://github.com/austint1121/Flatiron_GOATS_Vaccination_Prediction/tree/main

Danielle Rossman : <https://github.com/dmrossm>

Matthew Turner : <https://github.com/austint1121>

Hyunwook Paul Shin : <https://github.com/hp>

REFERENCES

1. <https://www.drivendata.org/competitions/66/flu-shot-learning/>

