ruth-kitasi / **Seasonal-flu-vaccine**

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Seasonal-flu-vaccine / **README.md**

ruth-kitasi Update README.md

21c14e9 · 27 minutes ago

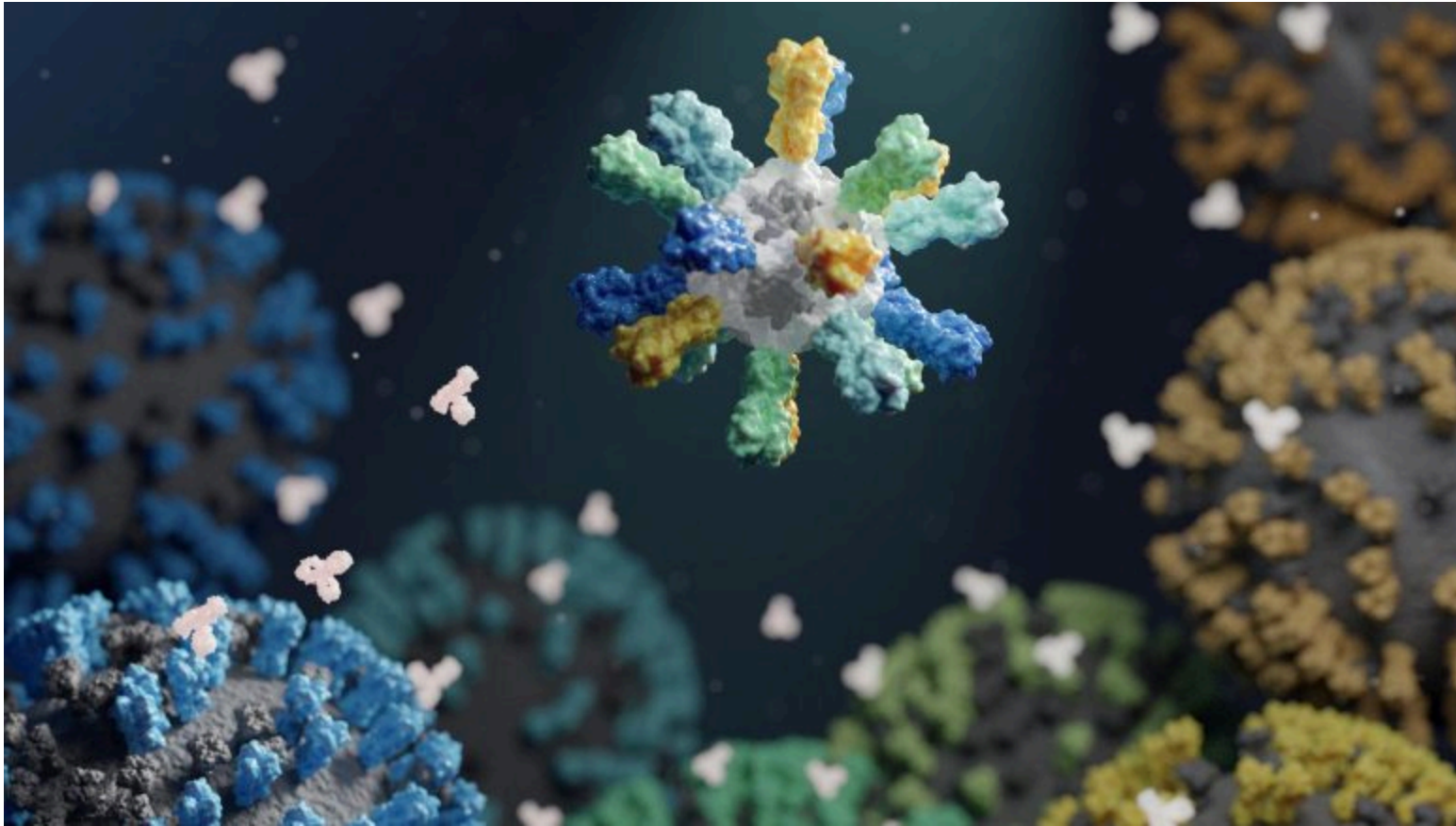45 lines (25 loc) · 1.59 KB

Preview   Code   Blame

Raw

Seasonal-flu-vaccine

Introduction

The occurrence of the flu season repeats annually, and each year people make a choice to either receive the flu shot or not. This attempts to develop a predictive model to forecast individuals' decision to receive the flu shot or not during the annual flu season

Problem statement

The aim of the project is to assist in public health planning and decision-making by providing insights into vaccination trends and helping allocate resources effectively to the United States government health Agencies

Main Objective

Create a model that can predict seasonal flu vaccine uptake based on a person's background and patterns of behavior

Important features

Top 10 Features by Importance
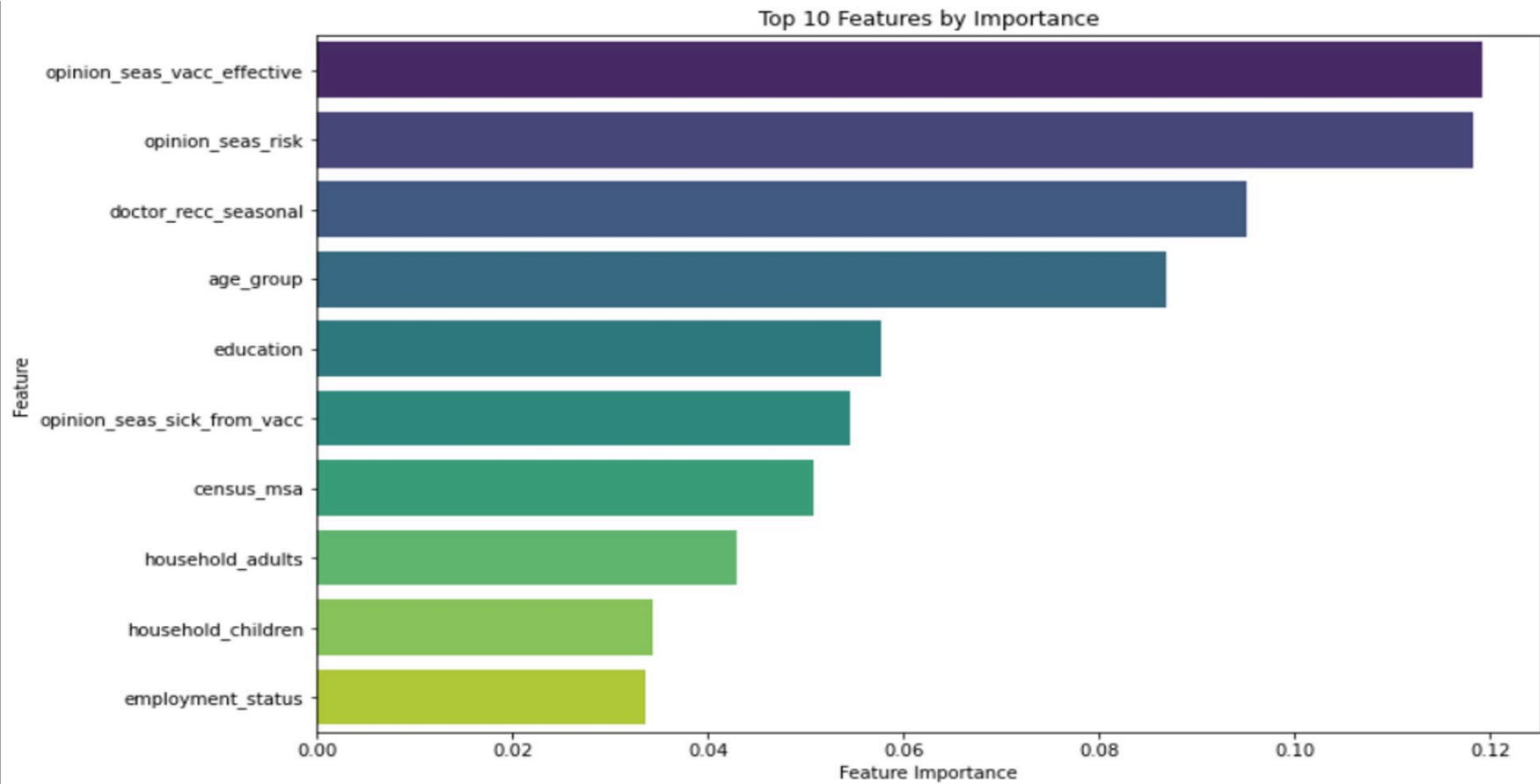
Models

- Logical Regression
- Decision trees

Evaluation

- confusion matrix
- ROC AUC

Conclusions

- Personal opinion about the vaccine greatly affects the uptake

- Errors minimized using the logical regression model.

- The comparison between the logical regression an the decision tree model shows that logical regression is a better-performing model.

Recommendations

- Careful examination of the significance of identified predictors will help understand underlying factors and ensure fairness in decision-making.

- Include a wider range of demographic groups, thereby achieving a more diverse and balanced dataset.

- Regularly review and update the model to ensure it adapts to new data and trends.