

Predicting Contraception Usage

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Goal

Predict
contraception
usage.

Approach

Tools

- sklearn
- pandas
- streamlit
- SQL
- SHAP
- Tableau

Data

1987
Standard
Demographic
and Health
Survey in
Indonesia

Features

- Age
- Number of
children born
- Media
exposure level
- etc.

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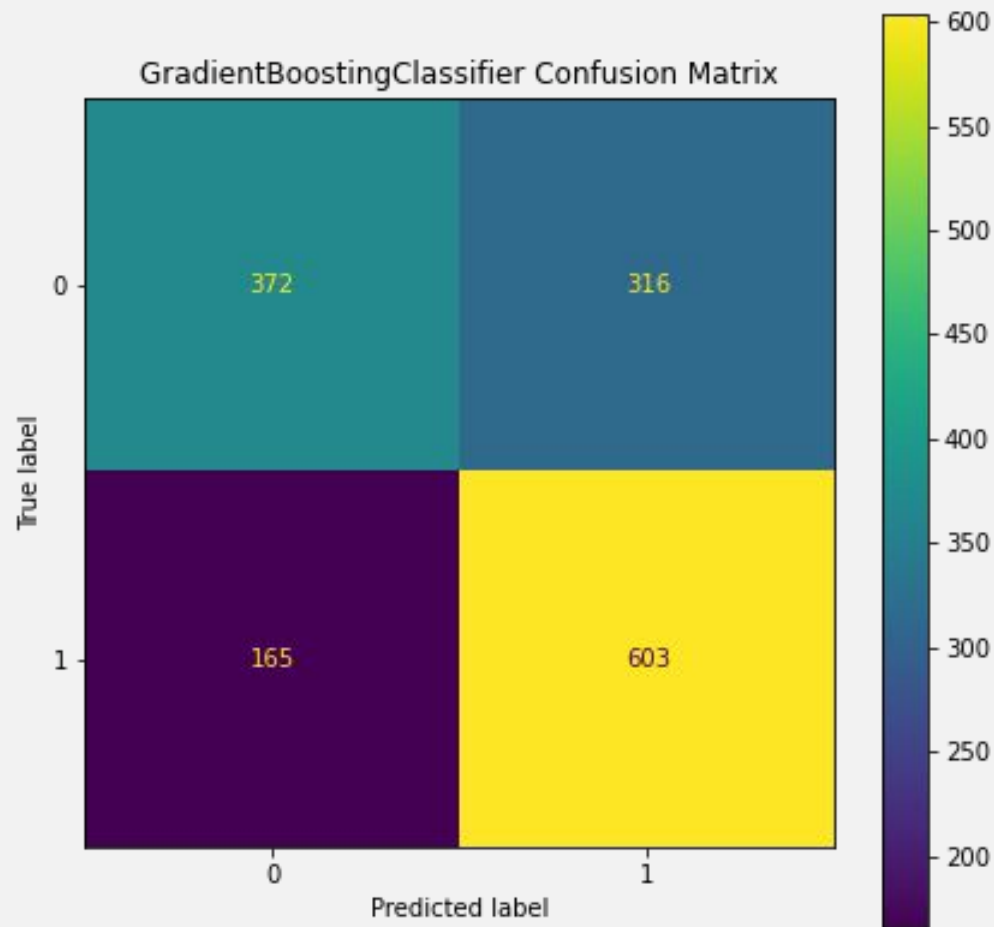
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- Age
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exposure level
- Education
- etc.

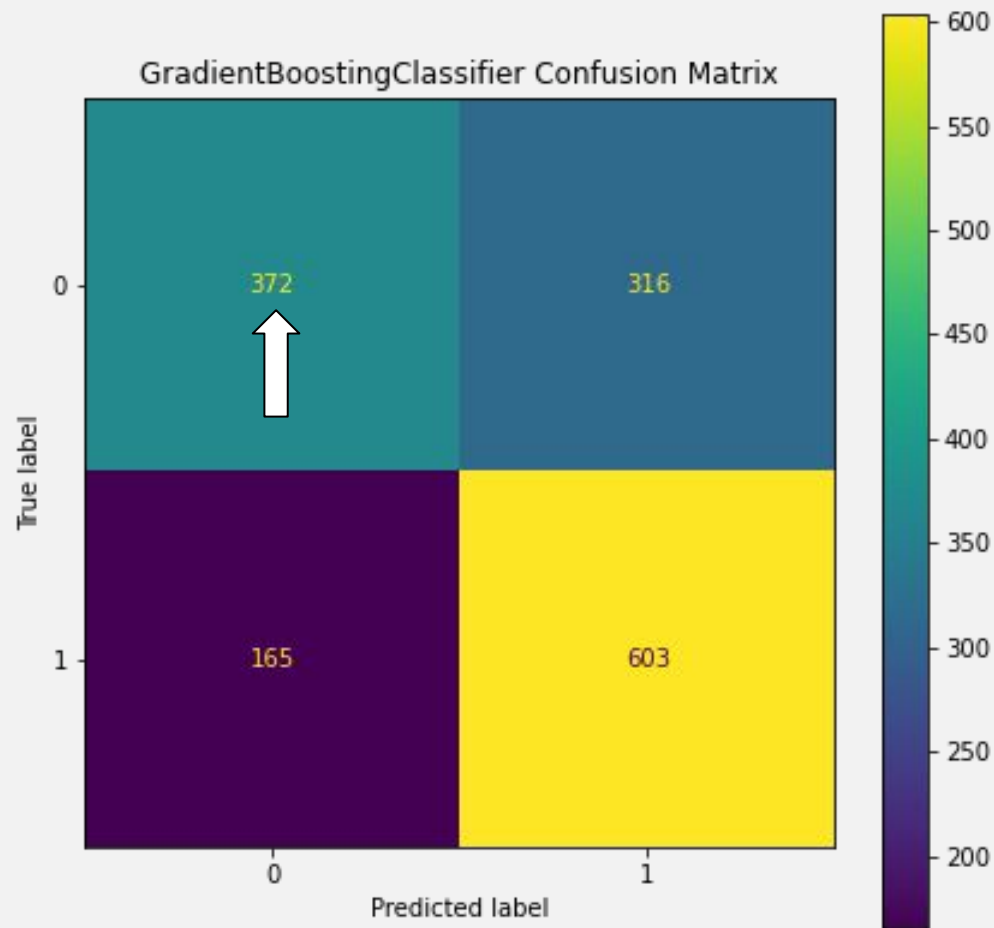
Model-

GradientBoostingClassifier



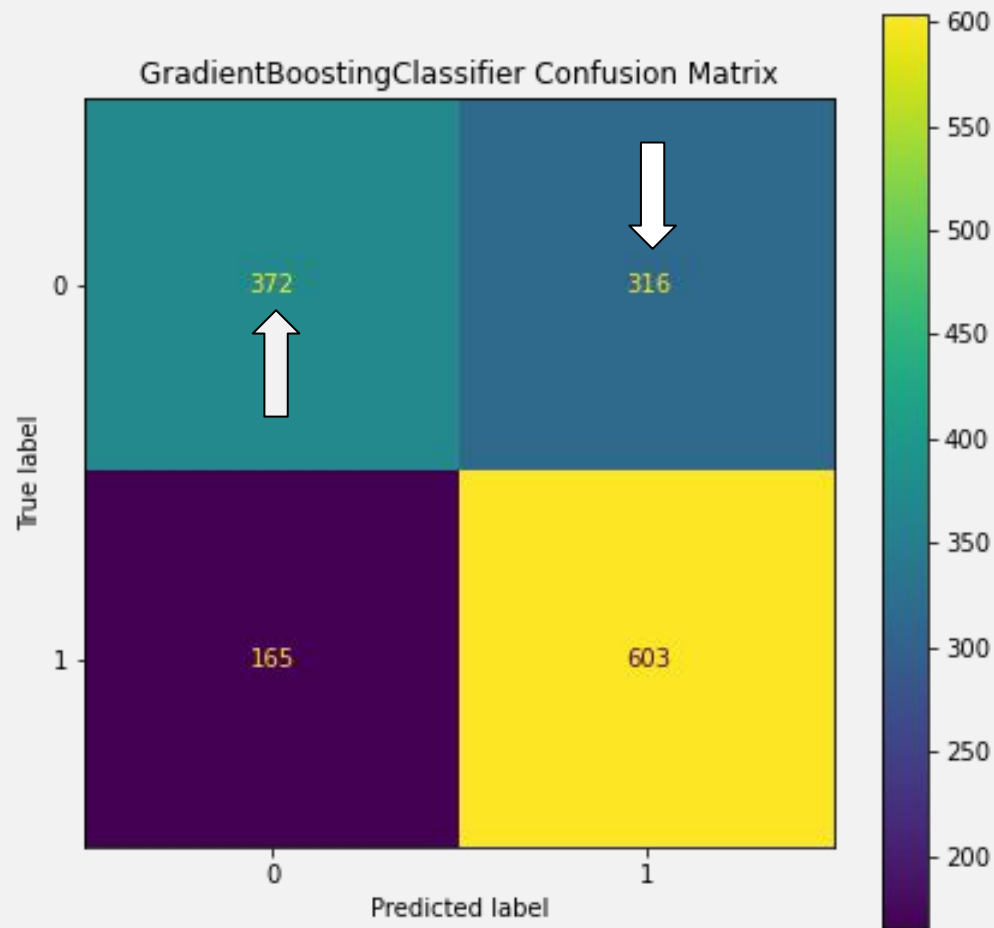
Model-

GradientBoostingClassifier

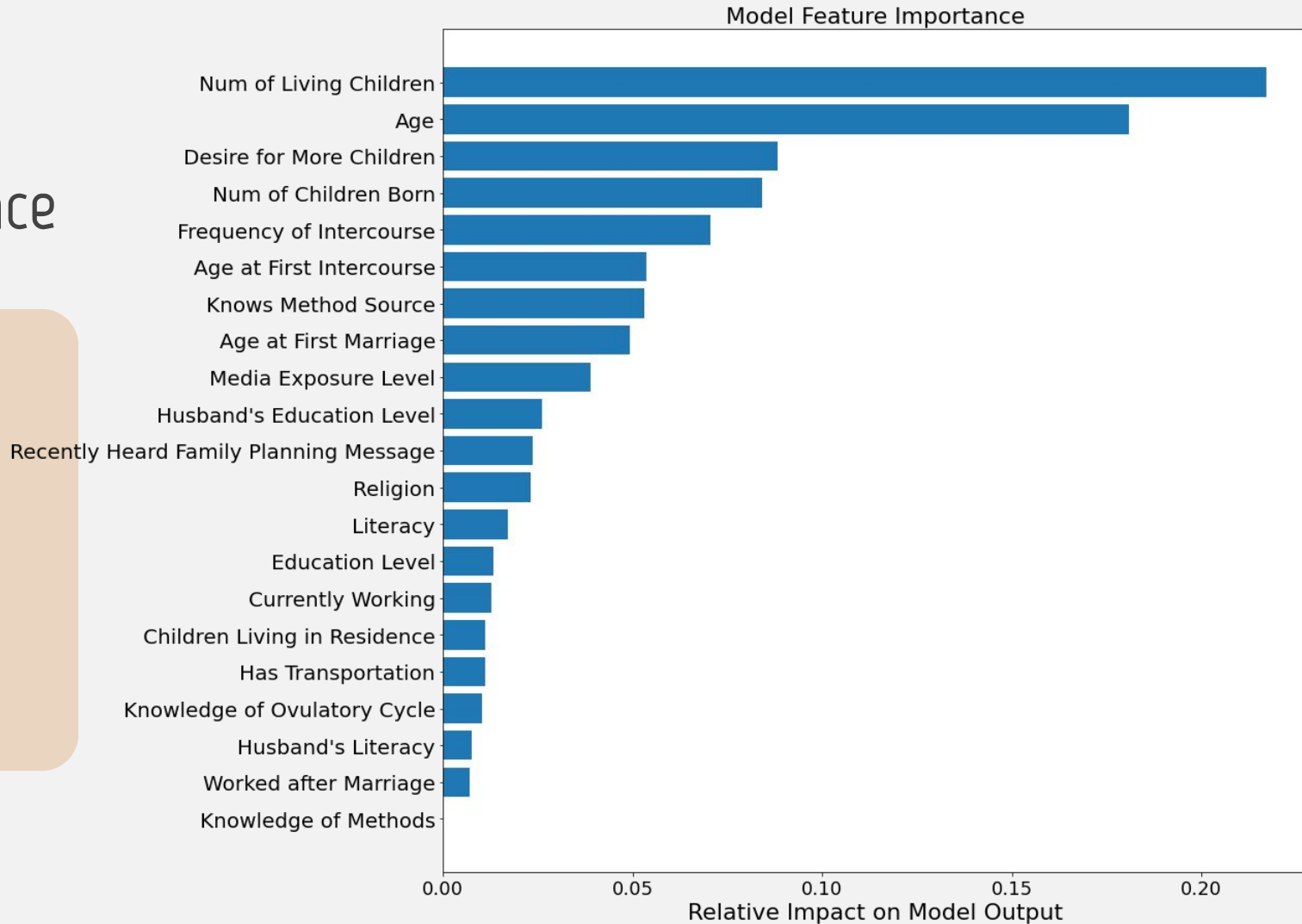


Model-

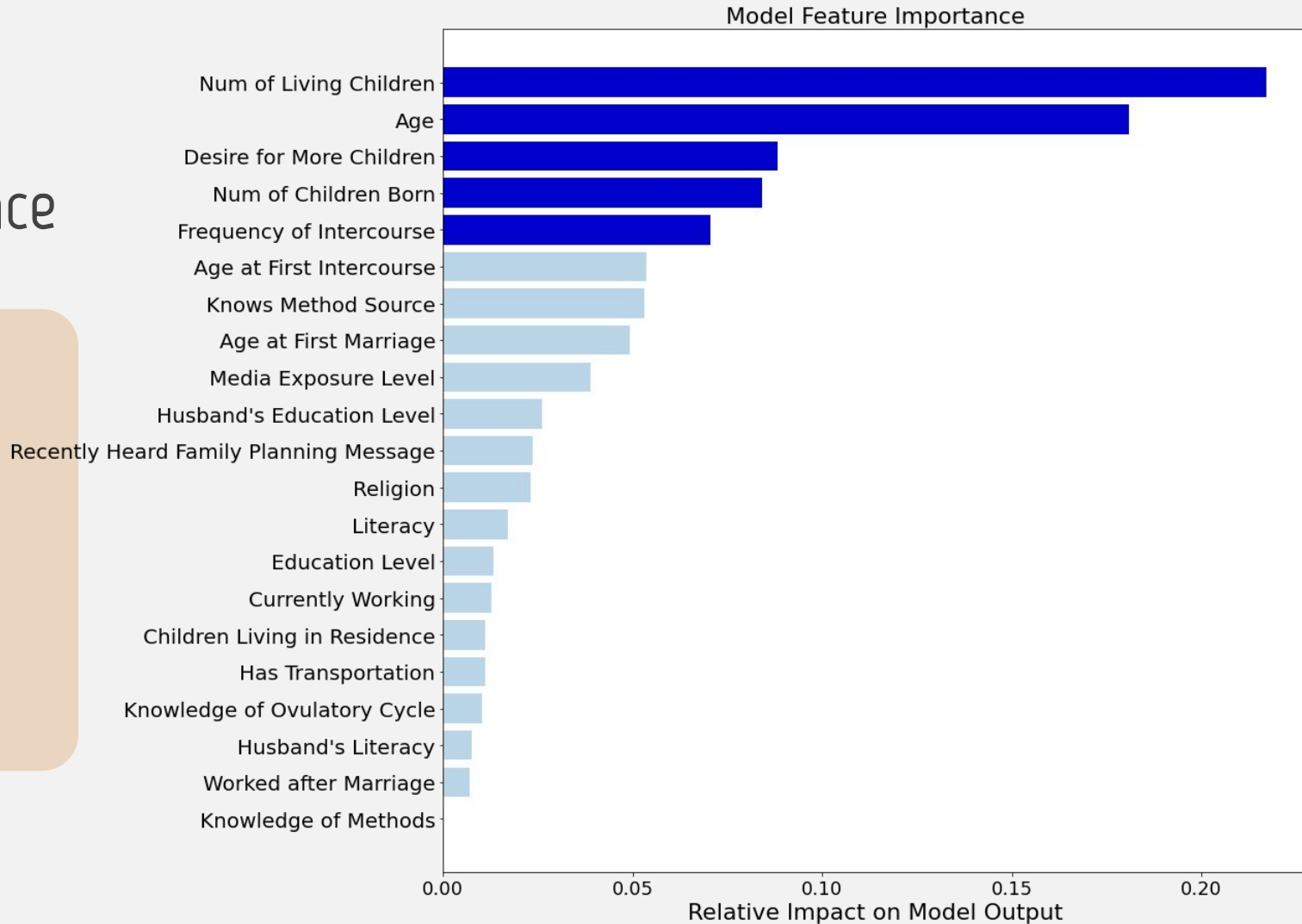
GradientBoostingClassifier



Feature importance



Feature importance





Make a prediction!

Current Age:



Age at first marriage:



Media Exposure Level: (0 = No Exposure and 3 = Very Exposed)



Number of kids born:



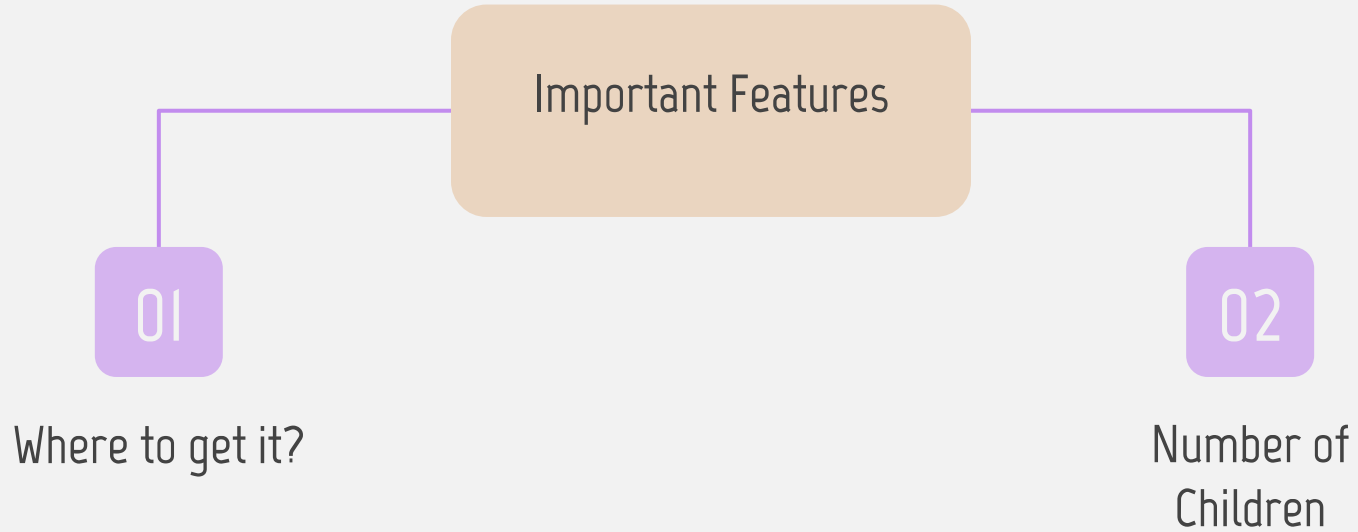
Age at first intercourse:

- +

Frequency of intercourse: (times per week)

- +

Takeaways





Questions ?

appendix.

Age
Num_living_children
desire_for_more_kids_dup
age_at_first_intercourse
freq_of_intercourse
age_at_first_marriage
Knows_method_source_dup
Num_children_born
heard_FP_message_in_last_month_dup
Religion_dup
Woman_currently_working_dup
media_exposure_level
Husbands_edu_level_dup
Literacy_dup
children_in_residence
Education_level_dup
Woman_worked_after_marriage_dup
Has_transportation
Husbands_literacy_dup
Knowledge_of_ovulatory_cycle_dup

