



# HEALTH INSURANCE FRAUD CLAIM AND AMOUNT PREDICTION

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Linear Regression:

R2 Score: 0.7438379967021389

MAE: 4130.880032321348

MSE: 38257831.16090765

Support Vector Regression:

R2 Score: -0.10538777675323274

MAE: 8385.755501216734

MSE: 165089819.66846362

Random Forest Regression:

R2 Score: 0.9673507029224009

MAE: 486.8743433333395

MSE: 4876177.102912018

Gradient Boosting Regression:

R2 Score: 0.8612602206771469

MAE: 2681.480745947937

MSE: 20720805.52268081



MODEL  
PERFORMANCE

## Health Insurance Claim Prediction

Enter the following details to predict the insurance claim amount:

Sum Insured

149999.99

- +

Age

18 35 100

Sex

☒ Male  
☐ Female

Weight (kg)

75.00

- +

BMI (Body Mass Index)

41.00

- +

Hereditary Diseases

☒ Yes  
☐ No

Number of Dependents

0 1 10

# WEB INTERFACE

Streamlit

# What can be done next



Model Interpretability and Explainability ( SHAP and LIME)



Fairness and Bias Mitigation.



Collaborating with domain experts ( Insurance, Healthcare )



Scalability and Performance Optimization.



Establish a streamlined and automated process for model training, testing, and deployment to enable faster iterations and updates.





# BLOG POST



THANK YOU

