

Heart Attack Possibility Prediction using Classification

Hello Fellow Interns,

For your Second Week, you're being requested to go through the dataset named '**Heart**', containing the following attributes:

- 1) age
- 2) sex
- 3) chest pain type (4 values)
- 4) resting blood pressure
- 5) serum cholestoral in mg/dl
- 6) fasting blood sugar > 120 mg/dl
- 7) resting electrocardiographic results (values 0,1,2)
- 8) maximum heart rate achieved
- 9) exercise induced angina
- 10) oldpeak = ST depression induced by exercise relative to rest
- 11) the slope of the peak exercise ST segment
- 12) number of major vessels (0-3) colored by fluoroscopy
- 13) thal: 0 = normal; 1 = fixed defect; 2 = reversible defect
- 14) **target**: 0= less chance of heart attack 1= more chance of heart attack

The dataset has been provided along with the task description.

Your TASK:

- Write your inferences based on the visualisation of sex, chest pain type, exercise induced angina, fasting blood sugar and rest ECG, fasting blood sugar and exercise induced angina, etc.
- Predict the possibility of heart attack using XGBoost or Logistic Regression.
Also show the prediction by taking an example in the end.

Tools & Libraries you may need:

- Python
- Matplotlib, scikit-learn, pandas
- Jupyter Notebook
 - Download the data provided.
 - Now, you can start your work by opening a Jupyter notebook in Google Colab: <https://colab.research.google.com/notebooks/intro.ipynb> or Anaconda if you already have it pre installed on you PC.
 - Load the data onto the notebook and you're good to go.

For any doubts contact Archi Agrawal: 9718661615

After you're done with your work, show it to us and then post it on LinkedIn by tagging your mentor and Cureya Team.