

Capstone Project: Classification Heart Disease

Capstone Project

Classification

- Data source: [Heart Failure Prediction Dataset | Kaggle](#)
- 918 observations
- Target:
 - Predict HeartDisease
 - 0 / 1
- 11 features



Capstone Project

Features

Name

Properties

Independent Features

- Age: age of the patient [years]
- Sex: sex of the patient [M: Male, F: Female]
- ChestPainType: chest pain type [TA: Typical Angina, ATA: Atypical Angina, NAP: Non-Anginal Pain, ASY: Asymptomatic]
- RestingBP: resting blood pressure [mm Hg]
- Cholesterol: serum cholesterol [mm/dl]
- FastingBS: fasting blood sugar [1: if FastingBS > 120 mg/dl, 0: otherwise]
- RestingECG: resting electrocardiogram results [Normal: Normal, ST: having ST-T wave abnormality (T wave inversions and/or ST elevation or depression of > 0.05 mV), LVH: showing probable or definite left ventricular hypertrophy by Estes' criteria]
- MaxHR: maximum heart rate achieved [Numeric value between 60 and 202]
- ExerciseAngina: exercise-induced angina [Y: Yes, N: No]
- Oldpeak: oldpeak = ST [Numeric value measured in depression]
- ST_Slope: the slope of the peak exercise ST segment [Up: upsloping, Flat: flat, Down: downsloping]

Target

- HeartDisease: output class [1: heart disease, 0: Normal]

Capstone Project

Steps

Categorical Variable Treatment

Find a way to encode all categories

Data Prep

Separate dependent/independent, data splitting,
...

Modeling

Check out different models

Model Evaluation

confusion matrix, ROC curve