Heart Disease Prediction

Machine Learning Term Project Summer 2020/2021

Summary

Cardiovascular diseases (CVDs) are the number 1 cause of death globally, taking an estimated 17.9 million lives each year, which accounts for 31% of all deaths worldwide. Because people with cardiovascular disease or at risk of developing cardiovascular disease (due to the presence of one or more risk factors such as high blood pressure, diabetes, hyperlipidemia, or an already established disease), the goal of our project is early detection and management where they can A machine learning model would be very useful.

Data Set

For this study, I have used a dataset from UCI Machine learning repository. It comprises a real dataset of 300 examples of data with 14 various attributes (13 predictors; 1 class) like:

- 1. age
- 2. sex
- 3. chest pain type (4 values)
- 4. resting blood pressure
- 5. serum cholesterol 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 flourosopy
- 13. thal: 3 = normal; 6 = fixed defect; 7 = reversable defect