Health-Care project

Heart attack prediction using Machine Learning

During the first half of Denmark 's opening game in the Eun 2020 championship against Finland, Christian Etrikaen a Danish midfielder collapsed. It wee la ter confirmed that the 29-year-o1d had gone into cardiac arrest on the pitch. Cardiac arrest is a more sudden and dramatic event unllke a heart attack In which the heart tends to keep beating. Blood clot could completely obstructs a coronary artery supplying blood to the heart muscle. If the heart muscle dies in the pm, it results to a heart attack. At the cite of rupture of an atherosclerotie, cholesterol plaque on the ânner wall of a coronary artery; âs the usual formation location for the blood clot that cause the heart attack.

Some of the common symptoms, complications and risk factors of a heart attack are chest pain, elevated cholesterol levels, Inc eased blood pmsure, tohaem use, dâabetm, gender, and a family history of heart attacks at an early age.

Figure 1: Danish tootballers form a shield around Christian Eriksen as he is being treated on the pitch. Photo- grapb: E'riedeo›aoa Vogél/Reutme. No+rrce: blips://www.tkeguardfiui.cool/Iootbatl/202a/j++a/z3/cbrTstiaa-erdrsa-cardiac-+u-zeeNewdtactioo-a+edic>Wy-sizrmd-yr-difibri1Iatioo

In this practical, you will do some real ctatistical

analysis of the data. The data can be downloaded

from

There are 7 ati ributes In the data. The 6 possible input variable are:

- age: Age of the person.

- ep: Chest pain level
- trtbps: Resting blood pmsure {In nmHg)
- chol: Cholestoral in mg/di fetched via BMI sensor
- thalachh: Maximum hear rate achieved
- oldpeak: previous peak

The output variable is called Hattack, and gives a 1/0 answer to the question ‘did the person had a heart attack?’