

# STROKE PREDICTION

Abdulrahman Alqeisi - Alhamza SHanshal

May 2023

## 1 Introduction

A stroke, commonly referred to as a brain attack, occurs when something blocks blood flow to a specific area of the brain or when a blood vessel in the brain breaks. In both cases, the brain either ages or is damaged. A stroke may cause death, severe disability, or irreversible brain damage. In this project, we aim to predict if a certain person will be facing a stroke based on some given data using python programming.

## 2 Abstract

Stroke care and diagnosis have been improved as a result of the detrimental effects it has on society. Caretakers can improve patient management by methodically mining and storing the patients' medical records thanks to an increasing synergy between technology and medical diagnosis. Therefore, it is crucial to investigate how these risk variables interact with one another in patient health records and comprehend how they each contribute differently to stroke prediction. For accurate stroke prediction, the numerous components in electronic health data are comprehensively analyzed in this study. We determine the most crucial variables for stroke prediction using a variety of statistical methods and principal component analysis. We come to the conclusion that the most crucial variables for diagnosing stroke in patients are age, heart disease, average blood glucose level, and hypertension.

## 3 Work

My friend and I have both worked on this project together looking for different ways to build the model and to write the code that we have done.