Business understanding

Nowadays, we are witnessing a rapid growth in the number of motor vehicles in circulation, and as a consequence, a continuous increase in the number of road accidents, despite the efforts made to implement modern infrastructures meeting international standards. These accidents are now one of the leading causes of death in the world according to World Health Organization (WHO) The problem is not specific to a given country, but the whole world undergoes this phenomenon which cannot be inevitable. Terrifying statistics were published by WHO that indicate the following; About 1.25 million deaths per year, accidents are the Leading cause of death among young people aged 15 to 29, Almost half of those killed on the roads are “vulnerable users” (pedestrians, cyclists and motorcyclists). Without sustained action, road accidents are projected to become the seventh leading cause of death by 2030. The consequences of road accidents go beyond threatening human lives, it also has a considerable economic impact for the relatives of the victims and the countries concerned. The treatment of victims very often requires large sums of money and the cost of repairing damaged public funds which can be costly to the government. Accurate prediction of accident severity can be helpful to provide proactive solutions and test the readiness of road practitioners and local governments. In this project, we develop machine learning models to predict severity of road accidents in UK based on data collected in 2017.