

## **ABSTRACT**

Nowadays fraudulent insurance claims are the problem faced by many of the insurance companies which leads to huge financial loss yearly. These frauds have adverse consequences on society as the losses are settled down by increasing the premium cost of policy holders. Also, the traditional claim investigation process being time consuming and tedious that generally leads to inaccurate results has been identified as the main culprit. Thus, in this project we develop an automated fraud detection application framework based on machine learning and XGBoost algorithm. The aim is to identify fraud claims accurately within a shorter period of time. Throughout the process data analysis is used to validate, clean and extract the relevant data. Hence, by using this framework insurance companies can maintain their respectability in the outside world and can also share trustworthy relationships with customers.