# Car Insurance Claim Prediction

## Project 2

José Cunha – up201905451 Mariana Teixeira – up201905705 Raquel Carneiro - up202005330





## Specification of the Problem



The Dataset contains information on policyholders having the attributes like policy tenure, age of the car, age of the car owner, the population density of the city, make and model of the car, power, engine type, etc, and the target variable indicating whether the policyholder files a claim in the next 6 months or not.

#### Goal:

train an AI to **predict** whether the policyholder will file a claim in the next 6 months or not, based on information on policyholders.

#### **Related Work:**

 https://www.kaggle.com/datasets/ifteshanajni n/carinsuranceclaimpredictionclassification?select=train.csv





## Tools and algorithms

Linear Regression

Commonly used to predict insurance based on features.



Random Forests

Combines multiple decision trees to improve accuracy.

Gradient Boosting

Combines multiple weak models to create a strong model.

- Libraries:
  - Jupiter Notebook
  - Pandas library
  - Mathplotlib library



### **Work Carried Out**

- Pre-process the data.
- Check for missing values or outliers.