**THE UNIVERSITY OF HONG KONG**

**DEPARTMENT OF COMPUTER SCIENCE**

**FITE7410 Financial Fraud Analytics**

**First Semester, 2022-2023**

**Assignment 2**

**(Due Date: Nov 25 (Fri) 23:59)**

**Assessment Criteria:**

* Plagiarism: Please follow the guidelines laid down by our department.
* You are allowed to discuss the assignment with your classmates; however, direct copy and paste is PROHIBITED and would be considered as PLAGIARISM.
* Assignments would be marked based on the logic, presentation and understanding of the problem, not only on accuracy.

1. Any TWO Supervised Learning Algorithms
   1. Download the following dataset Auto Insurance Claims Data from the link below:

https://www.kaggle.com/buntyshah/auto-insurance-claims-data

* 1. Using the R package, develop two fraud detection models with any TWO supervised learning algorithms.
  2. You can refer to the provided R program of a fraud detection model using TWO sample supervised learning algorithms

1. Write an essay of not more than 2 pages on the following:

Based on the results of your fraud detection models developed in (1) above:

* 1. Describe the performances of the 2 fraud detection models based on the results; and
  2. Explain which one is more suitable for this case and why from a practical perspective by citing examples.

1. Submission on Moodle:
   1. R language script
   2. A **pdf** version report