IN3062: Written Report

IN3062 INTRODUCTION TO ARTIFICIAL INTELIGENCE

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# Introduction (15%)

This report will look at different classification models within the machine learning domain and analyse their accuracies. The dataset used contains mobile phone features, which include continuous and discrete (binary) data types. The main objective is to find a classification model that is at least 95% accurate in predicting a phone’s selling price, given the phone’s features as input.

# Methodology (20%)

**Models / techniques used + their pros and cons:** Naïve Bayes, Logistic Regression, SVM, Random Forest, Decision Tree, kNN

**Hypothesis statement:**

**Choice of training and evaluation methodology:**

*How did you encode the input variables?*

# Analysis

## Results (35%)

**Description and presentation of the output (code + comments is appendix):**

*Include graphical illustration of results (training/testing error curves, confusion matrices, algorithm outputs, etc)*

## Evaluation (10%)

**Analysis and critical evaluation of results:**

*You might establish a baseline result first, computing metrics on training and validation sets, analyse errors, work on succeeding iterations, and alternative models. (If initial metrics are amazing and there are no errors is the problem too easy?)*

*Generally, be close to your data (visualise the dataset, collect summary statistics, look at errors, analyse how different parameters affect performance, try out different model* variants).

# Conclusions (5%)

**Lessons learned:**

# References (5%)

# Reflection (10%)

**Who did what:**