

# Report Title

Author Name1\* and Author Name2\*\*

\*Dept. of Information Studies

\*\*Dept. of Physics & Astronomy

University College London, WC1E 6BT

{email1,email2}@ucl.ac.uk

April 30, 2020

## Abstract

The abstract text goes here. Here is a bit more of my abstract.

## 1 Introduction

Here is the text of your introduction.

Here is a simple equation

$$\alpha = \sqrt{\beta} \quad (1)$$

I can refer to my equation by saying look at Equation (1).

Here is a multi-line equation:

$$\begin{aligned} f(\mathbf{x}; \mathbf{w}) &= \sigma(\mathbf{w}^T \mathbf{x}) \\ &= \frac{1}{1 + e^{-\mathbf{w}^T \mathbf{x}}} \end{aligned} \quad (2)$$

I can point people to literature like this [3] (a conference paper) or this [2] (a journal paper), or even this [1, Sec. 4.1] (a book, with section indicated). See the file `report.bib` for how these bibliographic entries are defined.

It helps to have a convention to the font used for particular mathematical objects. A common convention is: for simple values use lower case latin characters  $s$  (this might include observed values in probabilistic work); for sets use calligraphic upper case  $\mathcal{S}$ ; for vectors of values use bold latin  $\mathbf{s}$ ; for matrices use upper case latin  $S$ ; and for parameters (including parameters in probabilistic models) use lower case greek letters (scalar),  $\sigma$ , bold greek (vectors),  $\boldsymbol{\sigma}$ , and possibly upper-case greek for matrices of parameters  $\Sigma$ . However, it is up to you to develop your own style.

### 1.1 Subsection Heading

Write your subsection text here. Here I am referencing Section 1. Figures and tables can be inserted and referred to, e.g. Figure 1 and Table 1.



Figure 1: Simulation Results

	Interested	Understand
Linear Regression	N	Y
Neural Networks	Y	N

Table 1: Some results as a table.

### 1.2 Quoting and Emphasis

When you quote or emphasise things, you have a few options. I tend to put things in italics, e.g. Luke told me, *Put it in italics!*. If you prefer to put it in quote-marks then do so, but make sure you use left and right quotes properly, e.g. Luke told me, “Use left quotes to open, and right quotes to close!”.

## 2 Background

Your background section text goes here...

### 3 Method

Your method section text goes here...

### 4 Results

Your results section text goes here...

### 5 Discussion

Your discussion section text goes here...

## Declaration

This document represents the group report submission from the named authors for the project assignment of module: Foundations of Machine Learning and Data Science (INST0060), 2018-19. In submitting this document, the authors certify that all submissions for this project are a fair representation of their own work and satisfy the UCL regulations on plagiarism.

## References

- [1] Christopher M. Bishop. *Pattern Recognition And Machine Learning*. Springer-Verlag New York, 2006.
- [2] Tom Fawcett. An Introduction to ROC Analysis. *Pattern Recognition Letters*, 27:861–874, 2006.
- [3] Tomas Mikolov, Kai Chen, Greg Corrado, and Jeffrey Dean. Distributed Representations of Words and Phrases and their Compositionality. In *Advances in Neural Information Processing Systems (NIPS)*, pages 3111–3119, 2013.