



UNIVERSITY OF THE WITWATERSRAND

COMS3007

MACHINE LEARNING

Assignment

Authors:

A.E Bank

N. Blundell

Student Numbers:

604124

1132328

May 20, 2018

Contents

1	Introduction	5
2	Background	7
2.1	Data Set	7
2.2	About this design	8

Chapter 1

Introduction

This is where we put an introduction. In addition to the assignment requirements, we explore and discuss methods of analysing categorical data.

Chapter 2

Background

2.1 Data Set

The data set used for this assignment is the Mushroom Data Set.[2] It is based on records from The Audubon Society Field Guide to North American Mushrooms. The samples are from 23 species of the Agaricus and Lepiota Family. Each sample has 21 attributes and is classified as either poisonous or edible. The attributes are as follows:

class
cap-shape
cap-surface
cap-colour
bruises?
odor
gill-attachment
gill-spacing
gill-size
gill-colour
stalk-shape
stalk-root
stalk-surface-above-ring
stalk-surface-below-ring
stalk-colour-above-ring
stalk-colour-below-ring
veil-type
veil-colour
ring-number
ring-type
spore-print-colour
population
habitat

The Field Guide apparently (it is not free) states that there is no simple rule for determining whether a mushroom from one of these families is edible or not.

2.2 About this design

This is a simple report template with the UCT logo. Feel free to use/modify it to suit your needs. Variables that need to be altered have been commented to make modifications easier. For example if you need to change the university logo, look for the comment `% University Logo` in this file and then make appropriate modifications in that line.

A Table of Contents and a bibliography have also been implemented. To add entries to your bibliography, simply edit `biblist.bib` in the root folder and then use the `\cite{...}` command in `main.tex` [1]. The Table of Contents will be updated automatically.

I hope that you find this template both visually appealing and useful.

— Lin

Bibliography

- [1] Help on BibTeX entry types. <http://nwalsh.com/tex/texhelp/bibtex-7.html>. Accessed: 2015-03-12.
- [2] The Audubon Society Field Guide to North American Mushrooms
Jeff Schlimmer.
. Mushroom data set
, the audubon society field guide to north american mushrooms (1981). g. h. lincoff (pres.), new york: Alfred a. knopf. <https://archive.ics.uci.edu/ml/datasets/mushroom>. Accessed: 2018-04-11.