

Aarhus University

Decision Support Systems

PROJECT REPORT

Author:

Supervisor:

Lasse Lildholdt
(201507170)
Stinus Skovgaard
(201507170)
Daniel Tøttrup
(201507170)
Johan Vasegaard
(201507170)
Frederik Madsen
(201507170)

Christian Fischer Pedersen

9. marts 2020

Indhold

1	Introduction	1
2	Simple linear regression / Multiple linear regression	2
3	Logisitic regression / Linear discriminant analysis	3
4	Cross validation / Bootstrap	4
5	Subset selection	5
6	Shrinkage methods / DImension reduction methods	6

Figurer

INTRODUCTION

In this project report, the reader will be presented with problem solutions for the course Decision support systems. Throughout the solution the reader will achieve knowledge on several different subject within the main area. Each topic will be presented with the theory along with solutions for appropriate exercise to validate the presented theory.

The main topics which will be handled in this report will be as follows:

- Simple linear regression / Multiple linear regression
- Logisitic regression / Linear discriminant analysis
- Cross validation / Bootstrap
- Subset selection
- Shrinkage methods / DImension reduction methods

SIMPLE LINEAR REGRESSION / MULTIPLE LINEAR REGRESSION

LOGISITIC REGRESSION / LINEAR DISCRIMINANT ANALYSIS

CROSS VALIDATION / BOOTSTRAP

SUBSET SELECTION

SHRINKAGE METHODS / DIMENSION REDUCTION METHODS