

# Table of Contents

Dedication .....	iii
Table of Contents.....	v
Acknowledgements .....	xi
SECTION ONE: Data Mining Basics .....	1
Chapter One: Introduction to Data Mining and CRISP-DM.....	3
Introduction.....	3
A Note About Tools .....	4
The Data Mining Process .....	5
Data Mining and You.....	11
Chapter Two: Organizational Understanding and Data Understanding.....	13
Context and Perspective .....	13
Learning Objectives.....	14
Purposes, Intents and Limitations of Data Mining.....	15
Database, Data Warehouse, Data Mart, Data Set...? .....	15
Types of Data .....	19
A Note about Privacy and Security.....	20
Chapter Summary .....	21
Review Questions .....	22
Exercises.....	22
Chapter Three: Data Preparation .....	25
Context and Perspective .....	25
Learning Objectives.....	25
Collation .....	27

Data Scrubbing.....	28
Hands on Exercise.....	29
Preparing RapidMiner, Importing Data, and.....	30
Handling Missing Data .....	30
Data Reduction .....	46
Handling Inconsistent Data .....	50
Attribute Reduction.....	52
Chapter Summary .....	54
Review Questions .....	55
Exercise .....	55
SECTION TWO: Data Mining Models and Methods .....	57
Chapter Four: Correlation .....	59
Context and Perspective .....	59
Learning Objectives.....	59
Organizational Understanding.....	59
Data Understanding .....	60
Data Preparation .....	60
Modeling.....	62
Evaluation .....	63
Deployment .....	65
Chapter Summary .....	67
Review Questions .....	68
Exercise .....	68
Chapter Five: Association Rules .....	73
Context and Perspective .....	73
Learning Objectives.....	73
Organizational Understanding.....	73

