

# Specific packages for R

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# Contents

Preface	2
I Datatable	3
1 data.table (R)	4
II Tidyverse	6
2 tidyr	7
3 ggplot2	8
4 dplyr	9
5 purrr	10
6 tibble	11
7 RMarkdown	12
8 Shiny (R)	13
III Other	14
9 caret (Classification And REgression Training)	15
10 rstan	16
11 mlr	17

# Preface

This is a live document, and is full of gaps, mistakes, typos etc.

Part I

Datatable

# Chapter 1

## data.table (R)

### 1.1 Introduction

#### 1.1.1 Introduction

data.table() function

alt loading (fread; fwrite)

melt/dcast

`:= stuff`

`.N`

`..select_cols`

"with" in 3rd part of `[,]`, or first?

setkey

`.SD`

`.SDcols`

vector using `.`() in things

whole h3 on data.tables?

`df[a,b,c]`

on a, don't have to use

`df$x==3`

, can just do

`x==3?`

on b, can do old way

`c("a", "b")`

or new

`.(a,b)`

can do 3th col using `.SDcols`

joins in `data.table`

# Part II

# Tidyverse

## Chapter 2

# tidyr

### 2.1 Introduction

#### 2.1.1 Introduction



# Chapter 3

## ggplot2

### 3.1 Introduction

#### 3.1.1 Introduction

aes. can do within each plot or at start for all

data. can explicitly do data = allows for eg:

```
data = . %>% something()
```

plot types: col; line; scatter

formatting axis

labels

themes

## Chapter 4

# dplyr

### 4.1 Introduction

#### 4.1.1 Introduction

# Chapter 5

## purrr

### 5.1 Introduction

#### 5.1.1 Introduction

# Chapter 6

## tibble

### 6.1 Introduction

#### 6.1.1 Introduction

## Chapter 7

# RMarkdown

### 7.1 Introduction

#### 7.1.1 Introduction

## Chapter 8

# Shiny (R)

### 8.1 Introduction

#### 8.1.1 Introduction

## Part III

## Other

## Chapter 9

# caret (Classification And REgression Training)

### 9.1 Introduction

#### 9.1.1 Introduction

includes xgboost.



# Chapter 10

## `rstan`

### 10.1 Introduction

#### 10.1.1 Introduction

# Chapter 11

## mlr

### 11.1 Introduction

#### 11.1.1 Introduction

machine learning for R?