Tidyverse

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Contents

Chapter 1

      tidyverse   ,   ,   ,   bookdown.   R for data
science,tidyver   .   .   .

    R   ,   .

Chapter 2

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- : . . , , cell . .

  . , sample1 gene2 , (sample_1) (gene_2) cell, . ? .

- , . , case, case , , .

  .

Table 2.1: Demo of wide data

	sample_1	sample_2	sample_3	sample_4	sample_5
gene_1	83	48	89	80	51
gene_2	78	88	39	99	56
gene_3	75	53	9	15	36
gene_4	41	44	27	40	13
gene_5	82	79	12	54	47

Table 2.2: Demo of long data

Sample_name	Gene_name	Expression
sample_1	gene_1	9
sample_2	gene_1	87
sample_3	gene_1	31
sample_4	gene_1	80
sample_5	gene_1	35
sample_1	gene_2	82
sample_2	gene_2	100
sample_3	gene_2	58
sample_4	gene_2	30
sample_5	gene_2	65
sample_1	gene_3	98
sample_2	gene_3	18
sample_3	gene_3	55
sample_4	gene_3	38
sample_5	gene_3	32
sample_1	gene_4	79
sample_2	gene_4	73
sample_3	gene_4	22
sample_4	gene_4	75
sample_5	gene_4	33
sample_1	gene_5	3
sample_2	gene_5	34
sample_3	gene_5	8
sample_4	gene_5	51
sample_5	gene_5	67

Chapter 3

Literature

Here is a review of existing methods.

Chapter 4

Methods

We describe our methods in this chapter.

Chapter 5

Applications

Some *significant* applications are demonstrated in this chapter.

5.1 Example one

5.2 Example two

Chapter 6

Final Words

We have finished a nice book.