

Algorithms for Data Science - Exam Reading List

All of the exercises and reading lists are found in MMDS (Mining of Massive Datasets)

Data Streams

Chapter 4 of MMDS, start with section 4.1

Bloom Filters

- *read*: section 4.3
- *practice*: exercises 4.3.1, 4.3.2

Distinct Items

- *read*: section 4.4
- *practice*: exercise 4.4.1

Estimating Moments

- *read*: section 4.5
- *practice*: exercises 4.5.1-4.5.6

Counting Ones in a Window

- *read*: section 4.6
- *practice*: exercises 4.6.1-4.6.3

Frequent Itemset Mining

Chapter 6 of MMDS.

Association Rules

- *read*: section 6.1
- *practice*: exercises 6.1.1-6.1.8

A-Priori Algorithm

- *read*: section 6.2
- *practice*: exercises 6.2.1-6.2.6

Advertising on the Web

Chapter 8 of MMDS, start with sections 8.1 and 8.2

Online Matching

- *read*: section 8.3
- *practice*: exercise 8.3.1

Adwords

- *read*: sections 8.4, 8.5
- *practice*: exercise 8.4.1