

Matrix Methods in Data Science with JULIA  
Session 1 Lecture notes

Abhijith Chandrababhu

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# Chapter 1

## Matrix based Data Mining Applications

### 1.1 Introduction

The field of Data Mining aka Knowledge Discovery in Data, or KDD saw its first light during the 1990s, and has evolved along with the processing power and storage capacities of modern computer systems. The amount of data only from the web is in the order of exabytes and continues to increase, this along with other sources of data resulting from research and experimentation proves to be one the most important sources of knowledge.

Data Mining or in contemporary terminology, Data Science, is an interdisciplinary science, combining techniques from computer science, database technologies, statistics, optimization and lastly matrix methods [1].

### 1.2 Vectors and Matrices

# Bibliography

- [1] Lars Eldén. *Matrix Methods in Data Mining and Pattern Recognition*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 2007.