

Machine Learning Algorithms and Concepts

Table of Content

Part I: Introduction & Preliminary Requirements

Ch1: Basic Concepts

Ch2: Visualization

Ch3: Probability and Statistics

Part II: Unsupervised Learning

Ch4: Clustering

Ch5: Frequent Itemset, Sequence Mining and Efficient Information Retrieval

Part III: Data Engineering

Ch6: Feature Engineering

Ch7: Dimensionality Reduction and Data Decomposition

Part IV: Supervised Learning

Ch8: Regression Analysis

Ch9: Classification

Part V: Neural Network

Ch 10: Neural Networks and Deep Learning

Ch 11: Self-Supervised Deep Learning

Ch 12: Deep Learning Models and Applications (Text, Vision, and Audio)

Part VI: Reinforcement Learning

Ch13: Reinforcement Learning

Part VII: Other Algorithms and Concepts

Ch 14: Making Lighter Machine Learning Models

Ch 15: Graph Mining Algorithms

Ch 16: Concepts and Challenges of Working with Data