Machine Learning

Daliva J.S.C

Introduction

Linear Algebra		
Course	MIT Khan Academy	
Book	Introduction to Linear Algebra	
Probability and Statistics		
Course	MIT Khan Academy Probability Course Open Intro	
Book	Statistical Inference Applied Linear Statistical Models An Introduction to Generalized Linear Models All of Statistics Computer Age Statistical Inference Statistics in a Nutshell	Bayes' Rule Bayesian Methods for Hackers Think Bayes Practical Statistics for Data Scientists A/B Testing Designing with Data
Convex Optimization		
Course	Stanford Youtube	
Book	Convex Optimization	

Database Structure			
Type/Name		Book	Course
SQL	SQL Server	SQL Cookbook	Udemy
	Spark		Udemy
NoSQL	CouchDB		Udemy
Algorithms			
Course		Interactivepython Coursera	
Book		Grokking Algorithms Algorithms in a Nutshell	

Introduction

Type	Data Analytics	Data Science	Data Mining
Course	Network Science Book Udemy Udemy Coursera	Otexts Forecasting Coursera Coursera Coursera Udemy Edx	
Book	Sampling Outlier Analysis Fraud Analytics Web Analytics 2.0	Doing Data Science The Data Science HandBook	Principles of Data Mining Introduction to Data Mining Data Mining Techniques The Elements of Statistical Learning
More	Lean Analytics Social and Economic Networks Social Network Analysis for Startups	The Data Science HandBook Data Science for Business Causal Inference in Statistics	
Communication and Visualization			
Book	Web Scraping with Python Data Wrangling with Python Regular Expressions Cookbook	Communicating Data with Tableau Interactive Data Visualization for the Web Data Visualization with Python and JavaScript Storytelling with Data	

Introduction

Machine Learning			
Course	Coursera Coursera Udemy Caltech Video Lectures NLTK Stanford	Book	An Introduction to Statistical Learning Python Machine Learning Real-World Machine Learning Pattern Recognition and Machine Learning Recommender Systems Applied Predictive Modeling Fundamentals of Machine Learning for Predictive Data Analytics Reinforcement Learning: An Introduction Natural Language Processing with Python Text Analytics with Python

Algorithms	Supersived	Unspersived	Reinforcement
Regression	Linear Regression Decision Trees Random Forests		
Classification	Naive Bayes classifier Support Vector Machine Kernel Support Vector Logistic Regression Decision Trees Random Forests		
Clustering		K-Means/K-Modes Hierarchical Spectral Density-based spatial	
Instance-based	K-Nearest Neighbours Learning Vector Quantization		
Ensemble	Boosting AdaBoost Random Forest		
Dimensionality Reduction		Principal Component Linear Discriminant Independent Component Singular Value Decomposition	
Artificial Neural Networks			Perceptron Softmax Regression Multi-layer Perceptron Back-Propagation

Introduction

Type	Neural Network	Deep Learning	AI
Course	Coursera	Deep Learning Book Coursera Udemy	Udemy
Book	Make Your Own Neural Network	Deep Learning Hands-On Machine Learning Information Theory	A Modern Approach

Type	R	Python
Course	R for Data Science R packages Advance R Coursera Udemy	 Udemy Udemy Udemy
Book	R in Action	Think Python Fluent Python Python for Probability, Statistics, and Machine Learning Python Data Science Handbook
Lib	R Lib	Python Lib