Report AIL302m

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Abstract: In this report, we will explain how to implement 8 basic algorithms in Machine Learning such as Linear Regression, Neural Networks Learning, K-Means Clustering, Principal Component Analysis, Regularized Linear Regression and Bias vs. Variance,Support Vector Machines, ...

Introduction

In this report, we will build all assignments in the Stanford University machine learning course by Andrew Nguyen. The presentation on Colab makes it easier for us to convey ideas to our readers. We will put a google colab folder on each section we cover here.

1 Linear Regression

Link Google Colab: Assignment 1

2 Logistic Regression

Link Google Colab: Assignment 2

3 Multi-class Classification and Neural Networks

Link Google Colab: Assignment 3

4 Neural Networks Learning

Link Google Colab: Assignment 4

5 Regularized Linear Regression and Bias vs. Variance

Link Google Colab: Assignment 5

6 Support Vector Machines

Link Google Colab: Assignment 6

7 K-Means Clustering

Link Google Colab: Assignment 7

8 Anomaly Detection and Recommender Systems

Link Google Colab: Assignment 8