

Linear Regression (Gradient Descent and Stochastic Gradient Descent)

Dataset	Requirements
fish.csv	Using 'Length1', 'Length2', 'Length3', 'Height', 'Width' attributes to predict the fish weight ('Weight')
insurance.csv	Using all attributes (except 'charges') to predict the medical insurance cost ('charges')
wine.csv	Using all attributes (except 'quality') to predict the quality of wine ('quality')
weather.csv	Using all attributes (except 'Temperature_c') to predict the outside's temperature ('Temperature_c')

Requirements

- Standardizing data
- Splitting data into the training and testing set with ratio 7:3 (70% training, 30% testing)
- Coding from scratch for Gradient Descent.
- Using library for Stochastic Gradient Descent.
- Visualizing the cost (only for Gradient Descent)
- Using MSE and R² score to evaluate the performance (using **sklearn.metrics**)