

Assignment 7: Linear Regression

Objective

The objective of this assignment is to let you experiment with building predictive machine learning models applying linear regression.

The Exercise 7-3 demonstrates implementation of simple linear regression for prediction. It works with data about bluegill fish (`bluegill.txt`), which is used for training a model that can predict the age of a fish based on its size.

Tasks

1. Download the fish data file and run the exercise code cell by cell to understand the process and the operations.
2. Download the students' data from `student_scores.csv` and build a code to train a linear regression model that can predict the exam grade of a student based on the time used for preparation.
3. Research the code in exercises 7-4 and 7-5 and identify the differences between the three methods of regression programmed there.
4. Answer the questions:
 - a. how do the three methods differ?
 - b. in which type of projects each of them fits best?
5. Submit your solution and answers before the next session, where the discussion on regression will continue.

The instructors