

Thursday: Supervised Learning with Exploratory Data Analysis

Agenda

5 min: Overview

1 hr 55 min: Exercises

Specific Learning Outcomes

- I can perform numerical and visual summarization of data.
- I can provide my supervised learning solution having taken into consideration the exploratory data analysis principles.

Overall Learning Outcome

- I can analyze datasets using the principles of Exploratory Data Analysis through summary statistics, plotting features, correlation analysis, and feature importance.

Overview

In this session, we will get to work on a real-world problem taking into consideration the Exploratory Data Analysis methodology. The steps that we will undertake will not be limited to only graphical and non-graphical methods but will also consider dimensionality reduction techniques which we covered in the second week of core.

Exercises

- Supervised Learning with Exploratory Data Analysis: Exercise I. [[Link](https://colab.research.google.com/drive/1WZHimGCQ0WURbmEih14U1CQb_A9izgVQ?usp=sharing) [_https://colab.research.google.com/drive/1WZHimGCQ0WURbmEih14U1CQb_A9izgVQ?usp=sharing](https://colab.research.google.com/drive/1WZHimGCQ0WURbmEih14U1CQb_A9izgVQ?usp=sharing))]
- Supervised Learning with Exploratory Data Analysis: Exercise II. [[Link](https://colab.research.google.com/drive/1XaI0EBvOijXxZrdQgJQJNE0LCHHA-TKQ?usp=sharing) [_https://colab.research.google.com/drive/1XaI0EBvOijXxZrdQgJQJNE0LCHHA-TKQ?usp=sharing](https://colab.research.google.com/drive/1XaI0EBvOijXxZrdQgJQJNE0LCHHA-TKQ?usp=sharing))]
- Supervised Learning with Exploratory Data Analysis: Exercise III. [[Link](https://colab.research.google.com/drive/1pOLTm4tlpwplm2HTsmOaPLHYOOLS8Ht7?usp=sharing) [_https://colab.research.google.com/drive/1pOLTm4tlpwplm2HTsmOaPLHYOOLS8Ht7?usp=sharing](https://colab.research.google.com/drive/1pOLTm4tlpwplm2HTsmOaPLHYOOLS8Ht7?usp=sharing))]

“When we have all data online it will be great for humanity. It is a prerequisite to solving many problems that humankind faces.” – Robert Cailliau, Belgian informatics engineer and computer scientist who, together with Tim Berners-Lee, developed the World Wide Web.