Variable selection and model persistence – Lesson overview

Variables are the **building blocks of machine learning models**, and all contribute to and affect the model building process differently. **Variable selection** is necessary as it aims to improve model performance, speeding up model training and reduce computational costs. In this lesson, we will examine **variable selection techniques**, and how to apply them to select the **most informative features** for our models.

We will also look at how to effectively **save** a **trained machine learning model** and **load** it for future use, ensuring it can be embedded into real-world systems, shared, or deployed without the need to retrain.

Learning objectives

- Understand the concept of variable selection and why it is important.

- Know and apply variable selection techniques and observe their impact on model performance.

- Know how to save a trained model and its parameters for future use.

- Know how to load a saved model and use it.

Walk-through

Knowledge questions

Examples

Exercise

Variable selection

6 min

START

Saving and restoring models in Python

10 min   25 min   5 min   20 min

Variables and variable selection

55 min   5 min   40 min