Tutorial 1. Predicting Bottom Dissolved Oxygen from Surface Variables

1.1 Introduction

1.2 Data Preparation

1.3 Random Forest (RF) Model

1.4 Multi-layer Perceptron (MLP) Model

1.4.5 SHAP Interpretation

1.4.6 SHAP Dependence Plots

1.4.7 Visualize MLP Architecture

1.4.8 *Bonus: Test MLP on Another Station*

1.5 Compare RF and MLP Predictions

Exercise:

Q1. Change the number of estimators in the Random Forest

Q2. Change the number of neurons in the MLP model

Q3. Add or remove layers in the MLP model