Supplementary Table 1: List of the tuned hyperparameters for each Machine Learning algorithm. For each hyperparameter, the values inside square brackets were explored by Grid Search.

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| --- | --- |
| K-Nearest Neighbors (KNN) | *n\_neighbors*: the number of neighbors or K to use [5 to 13]*weights*: the weight function used in prediction [uniform or distance]*algorithm*: type of algorithm used to compute the nearest neighbors [ball tree, kd tree or brute] |
| Decision Tree (DT) | *criterion*: the function to measure the quality of a split in the tree [mse, Friedman mse or mae]*max\_depth*: the maximum depth of the tree [6 to 8]*max\_features*: the number of features to consider when looking for the best split at a node [auto, sqrt, log2]*min\_samples\_split*: the minimum number of samples required to split an internal node [2 to 5]*min\_samples\_leaf:* the minimum number of samples required to be at a leaf node [2 to 5]*splitter*: the strategy used to choose the split at each node [best or random] |
| Bayesian Ridge Regression (BRR) | *alpha\_1*: shape parameter for the Gamma distribution prior over the alpha parameter [1e-15, 1e-10, 1e-8, 1e-4, 1e-3, 1e-2, 1, 5, 10, 20]*alpha\_2*: inverse scale parameter (rate parameter) for the Gamma distribution prior over the alpha parameter [1e-15, 1e-10, 1e-8, 1e-4, 1e-3, 1e-2, 1, 5, 10, 20]*lambda\_1*: shape parameter for the Gamma distribution prior over the lambda parameter [1e-15, 1e-10, 1e-8, 1e-4, 1e-3, 1e-2, 1, 5, 10, 20]*lambda\_2*: inverse scale parameter (rate parameter) for the Gamma distribution prior over the lambda parameter [1e-15, 1e-10, 1e-8, 1e-4, 1e-3, 1e-2, 1, 5, 10, 20] |