**Results table for final project AH2179**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | **With real-time data** | | | | **Without real-time data** | | | |
| **Parameters** | **MAE** | **MSE** | **R2** | **Parameters** | **MAE** | **MSE** | R2 |
| OLS linear regression | - | 22.4308 | 958.2779 | 0.9741 | - | 28.0804 | 1398.2708 | 0.9623 |
| Ridge linear regression | Alpha = 15 | 22.4426 | 957.8304 | 0.9742 | Alpha = 2 | 28.0813 | 1398.3218 | 0.9623 |
| Regression trees | Criterion = squared\_error  Max\_depth = 5 | 25.4191 | 1628.6528 | 0.9560 | Criterion = absolute\_error  Max\_depth = 5 | 30.3104 | 2114.4452 | 0.9429 |
| Random forest | Max\_depth = 50  Max\_leaf\_nodes = 250  N\_estimators = 500 | 23.6601 | 1426.1062 | 0.9615 | Max\_depth = 100  Max\_leaf\_nodes = 250  N\_estimators = 1000 | 27.8496 | 1765.5505 | 0.9524 |
| XGBoost | Max\_depth = 5  Max\_leaves = 2  N\_estimators = 25 | 23.6939 | 1472.7392 | 0.9603 | Max\_depth = 5  Max\_leaves = 2  N\_estimators = 100 | 24.7572 | 1516.5300 | 0.9591 |
| Support Vector Machine (SVM) | C = 0.01  Epsilon = 0.1  Kernel = Linear | 22.2027 | 962.4412 | 0.9740 | C = 10  Epsilon = 0.1  Kernel = rbf | 30.9621 | 3575.1256 | 0.9035 |
| Neural network | Lay-out: {32}  Dropouts: False  Early stopping: False  Learning rate reduction: False | 21.8639 | 907.8991 | 0.9755 | Lay-out: {32, 32}  Dropouts: False  Early stopping: False  Learning rate reduction: False | 27.2936 | 1377.2672 | 0.9628 |