

[illegible]

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```
In [128]: RMSE = math.sqrt(mean_squared_error(Y_test, Y_pred))
MAE = mean_absolute_error(Y_test, Y_pred)
print('RMSE for Bagging =', RMSE)
print('MAE for Bagging =', MAE)

RMSE for Bagging = 1.0479392151576445
MAE for Bagging = 0.7363441131668378
```

```
In [129]: import seaborn as sns
import matplotlib.pyplot as plt

sns.set(color_codes=True)

ax = sns.regplot(Y_test, Y_pred, scatter_kws={'alpha':0.4})
ax.set_xlabel('Experimental pIC50', fontsize='large', fontweight='bold')
ax.set_ylabel('Predicted pIC50', fontsize='large', fontweight='bold')
ax.set_xlim(0, 12)
ax.set_ylim(0, 12)
ax.figure.set_size_inches(7, 7)
ax.set_title('Bagging', fontsize='large', fontweight='bold')
plt.show

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.
FutureWarning
<function matplotlib.pyplot.show>
```



AdaBoost Regressor

```
In [130]: from sklearn.ensemble import AdaBoostRegressor
ABR_model = AdaBoostRegressor(n_estimators=100, learning_rate=0.1, random_state=123)
ABR_model.fit(X_train, Y_train)
```

```
Out[130]: AdaBoostRegressor(learning_rate=0.1, n_estimators=100, random_state=123)
```

```
In [131]: Y_pred = ABR_model.predict(X_test)
```

```
In [132]: RMSE = math.sqrt(mean_squared_error(Y_test, Y_pred))
MAE = mean_absolute_error(Y_test, Y_pred)
print('RMSE for AdaBoost =', RMSE)
print('MAE for AdaBoost =', MAE)

RMSE for AdaBoost = 1.305304220170753
MAE for AdaBoost = 1.0595016716042231
```

```
In [133]: import seaborn as sns
import matplotlib.pyplot as plt

sns.set(color_codes=True)

ax = sns.regplot(Y_test, Y_pred, scatter_kws={'alpha':0.4})
ax.set_xlabel('Experimental pIC50', fontsize='large', fontweight='bold')
ax.set_ylabel('Predicted pIC50', fontsize='large', fontweight='bold')
ax.set_xlim(0, 12)
ax.set_ylim(0, 12)
ax.figure.set_size_inches(7, 7)
ax.set_title('AdaBoost', fontsize='large', fontweight='bold')
plt.show

/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: Pass the following variables as keyword args: x, y. From version 0.12, the only valid positional argument will be `data`, and passing other arguments without an explicit keyword will result in an error or misinterpretation.
FutureWarning
<function matplotlib.pyplot.show>
```

