Results 6/08/2020

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- Classification Models:
    - Logistic Regression;
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    - Decision Tree;
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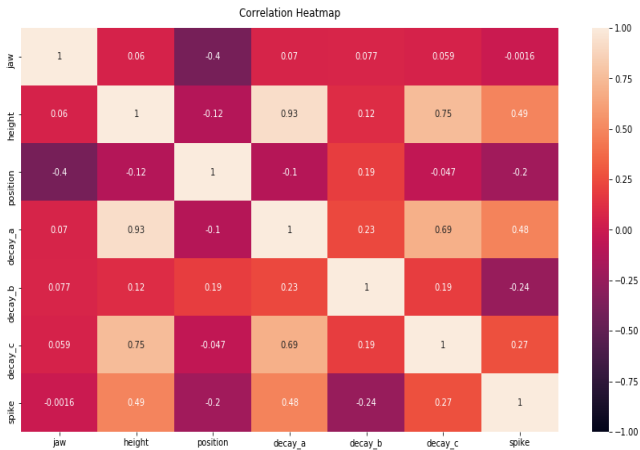   - Gradient Boost;
    - Neural Network.

Data Analysis

Figure: Spearman correlation heatmap
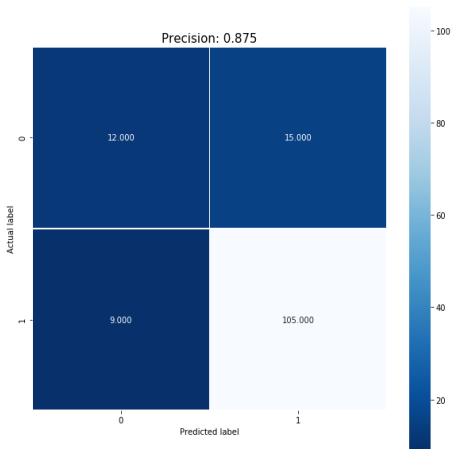
Logistic Regression

Figure: Confusion Matrix for the Logistic Regression Model
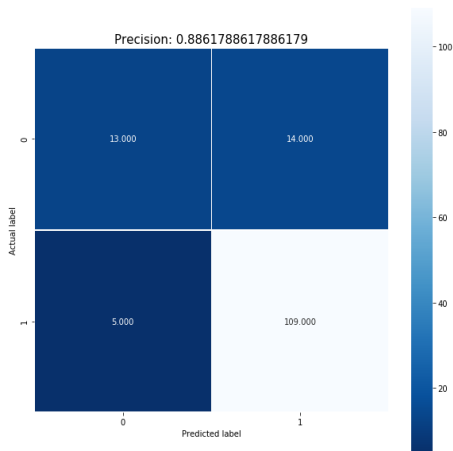
Support Vector Machine

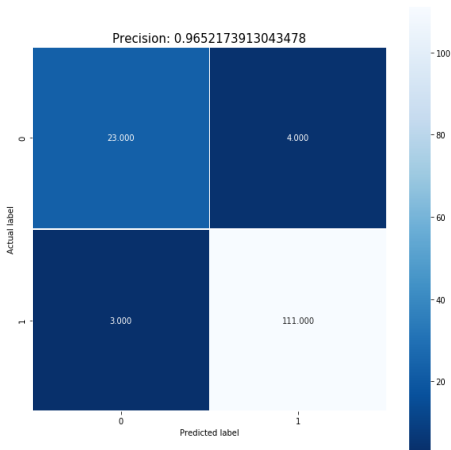Figure: Confusion Matrix for the SVM Model (linear kernel)

Decision Tree

Figure: Confusion Matrix for the Decision Tree Model (criterion ='entropy',
splitter ='best', max depth = 5, min. samples at leaf = 1)
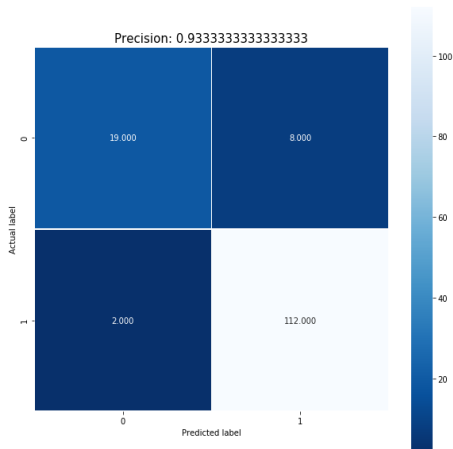
Random Forest

Figure: Confusion Matrix for the Random Forest Model (criterion = 'entropy',n. estimators = 100, min samples leaf = 1)
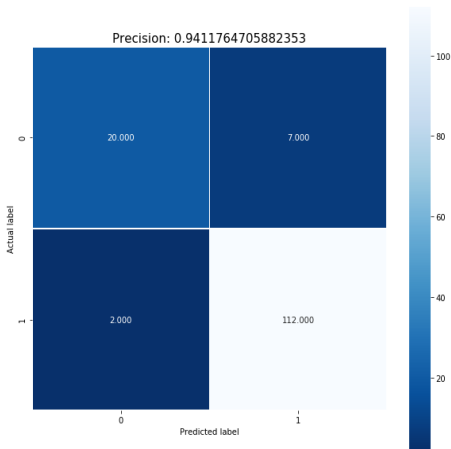
Gradient Boost

Figure: Confusion Matrix for the Gradient Boost Model
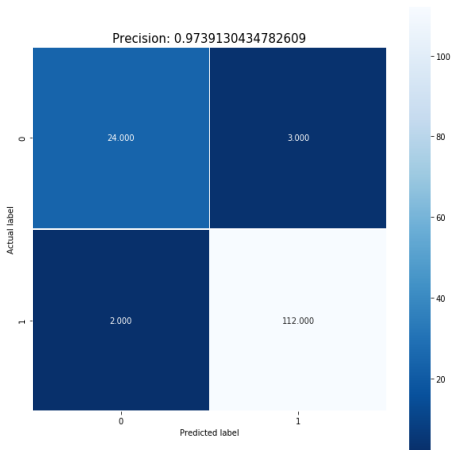
Neural Network

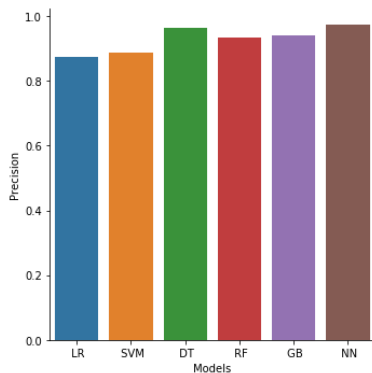Figure: Confusion Matrix for the Neural Network (solve r= 'adam', activation = 'tanh', alpha = 1e-1, random state = 1, max iterations = 400)

Results

Figure: Comparison of the model precisions