Data Mining 1:
Predicting positions of soccer players
Project Outline

Team No. 9

presented by

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1   Problem description

There are a great number of analysis in sports, especially soccer: Who is most likely to win the world championship? Who will be the player of the year? Or which position would be ideal so score?

Our group project aims to understand the characteristics of soccer players on a certain field position. Are there specific characteristics that determine if a player will be an amazing goal keeper or a top scorer?
After knowing the characteristics of the positions we want to conclude if the players in available in the FIFA'19 edition are playing in the position which is best suited for him.
In case a player isn't in his ideal spot would changing his position increase his performance?

2   Data Set

In order to perform our analysis we will use the FIFA 19 soccer player data which is available on Kaggle.
The dataset consists of 18000 rows and 89 attributes and was extracted from https://sofifa.com/.

3   Project approach and evaluation method

We want to apply the following techniques to our dataset:

- logistic regresion
- random forest
- naive bayes
- decision tree

In order to measure our success we want to use a k - fold - cross validation. Finally the models from kNN and decision trees should be compared using ROC curves.

4   What do you expect your results to look like? (Model/Clusters/Patterns)

The result is a classification model. The ideal position for each player will be based on his characteristics.
We will be determining clusters by assigning the players in each positions as different clusters.