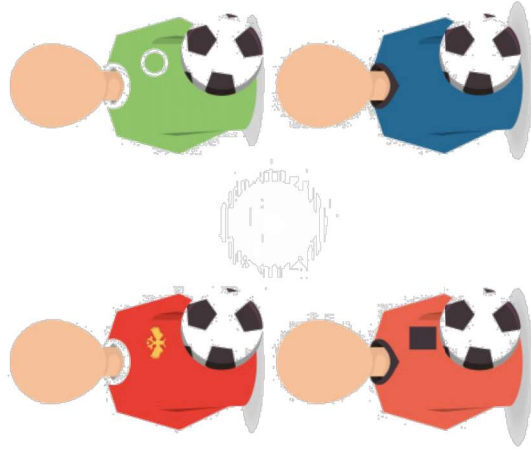


5. Predicting soccer results

- Given the **players** overall **performance indicators** obtained on the basis of the players position or role (forward, midfielder, defender and goalkeeper) it is possible to **predict the result of the matches**.



5. Predicting soccer results

- Dataset:
 - +25,000 matches
 - +10,000 players
 - 11 European Countries with their lead championship
 - Seasons 2008 to 2016
 - Players and Teams' attributes* sourced from EA Sports' FIFA video game series, including the weekly updates

Player attributes

overall_rating, potential, preferred_foot, attacking_work_rate, defensive_work_rate, ...

Team attributes

chanceCreationPassing, chanceCreationCrossing, chanceCreationShooting, defencePressure, ...

5: Predicting soccer results

1. Model: Bayesian Network

- Define the structure of the graphical model
- Define/Estimate the parameters of the model based on your knowledge and/or on the training data

2. Some possible questions?

- Can a BN model WIN/LOSS?
- What is the effect of imbalanced data?
- Can you estimate the sensitivity of the model by considering some subset of variables to make the correct prediction?
- Can you evaluate the impact of different discretization strategies?