Machine Learning in Soccer

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Goal

- Bring efficiency to transfer
- Improving players skills
- Reveal player hidden value
- Evaluate player pricing
- Identify useful players

Handling the data
(EDA)

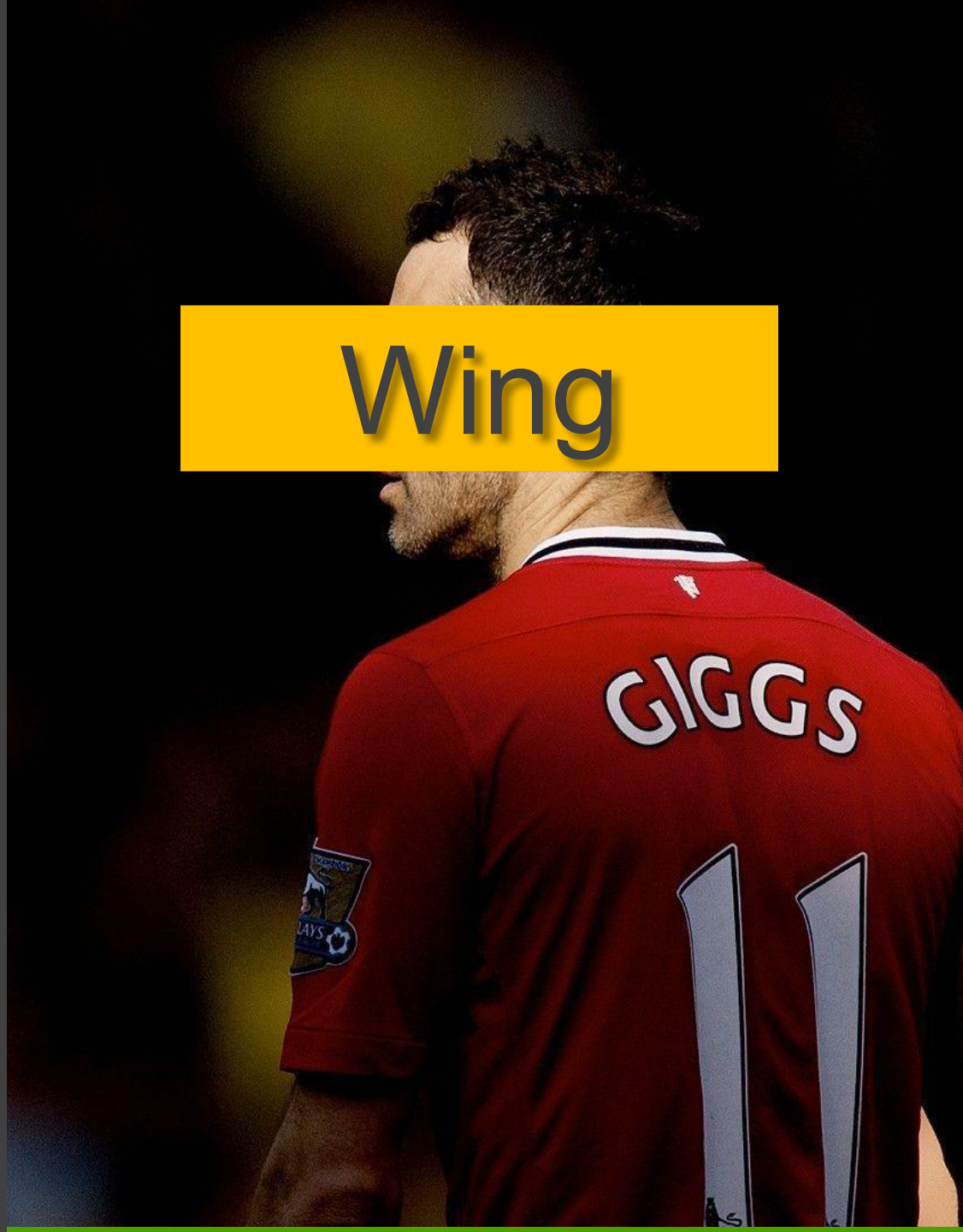
- Checking invalid data
- Bringing out the most relevant features
- Creating player classes
- Sorting and separating players according to their positions

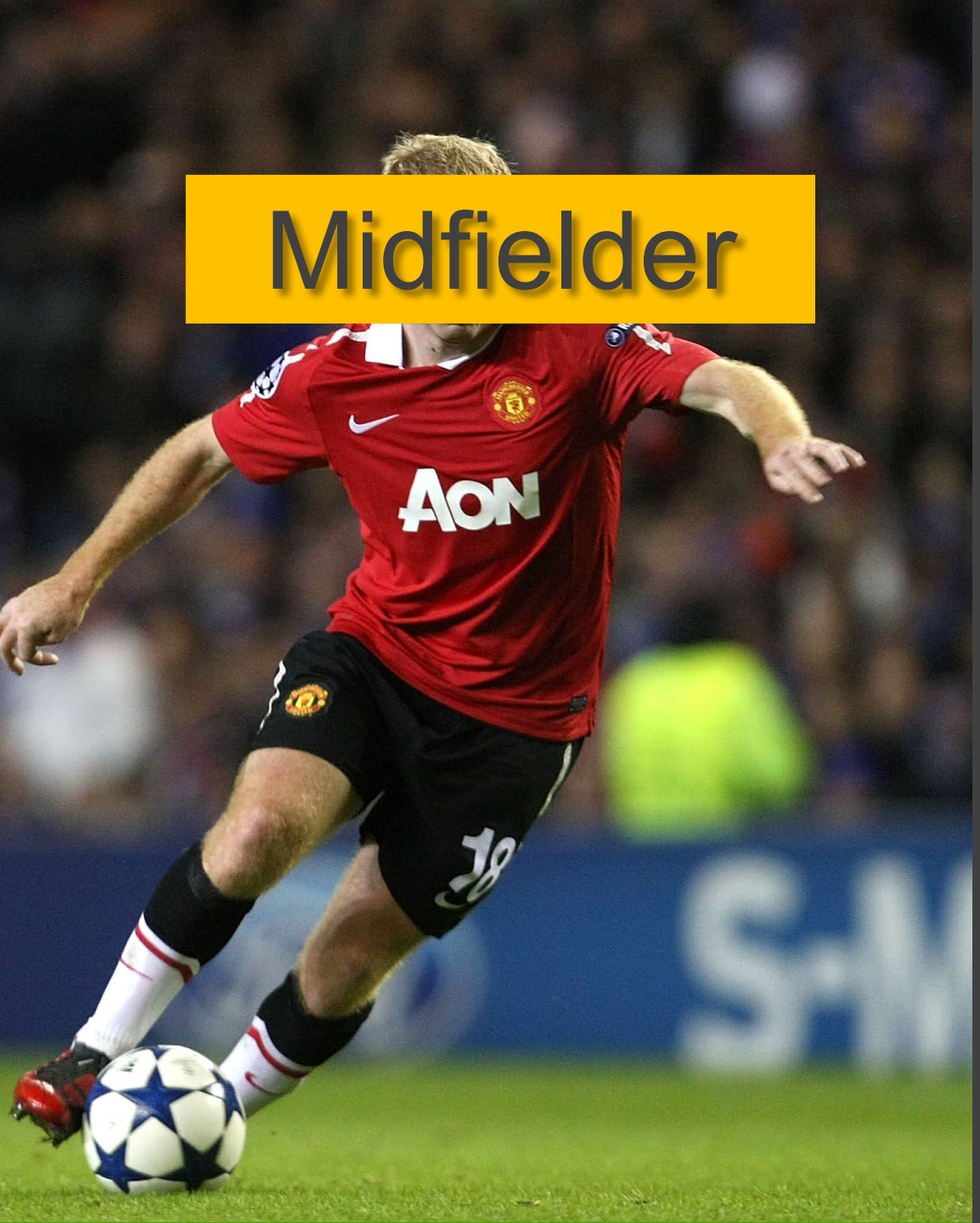

3-5-2
Strikers
Strikers
Wings
Wings
Midfielders
Midfielders
Defenders
Defenders
Goalkeeper

Striker

- Ball control
- Attacking position
- Finishing
- Volleys
- Penalties
- Heading
- Dribbling

- Ball control
- Dribbling
- Attacking position
- Acceleration
- Vision
- Long shots
- Crossing
- Long pass
- Short pass
- Free kick
- Speed





- ball control
- Short pass
- Long pass
- Vision
- Dribbling
- Long shots
- Attacking position
- Crossing,
- Free kick
- Heading
- Marking

- Interceptions,
- Standing tackle
- Marking
- Sliding tackle
- Short pass
- Long pass
- Heading
- Aggression.

Goalkeeper

- Gk positioning
- Gk diving
- Gk kicking
- Gk handling
- Gk reflexes
- Jumping
- Vision

ML rerults

- Multi Linear Regrssion
  - Avg Train: 93.5, Avg Test: 93.5
- Random Forest Regrssion
  - Avg Train: 93.8, Avg Test: 93
- MLR > RFR base model.

What is next

- More advanced tuning
- Time series with team data for league championship prediction
- Live update

Thank You!

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