# $3^{\text {rd }}$ Workshop on Machine Learning and Data Mining for Sports Analytics 

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dtai.cs.kuleuven.be/events/MLSA16

## Schedule

- 09:00-09:20 Introduction
- 09:20-10:40 Session I: Prediction challenge
- 10:40-11:00 Coffee break
- 11:00-12:40 Session II
- 12:40-14:20 Lunch break
- 14:20-16:00 Session III, including invited talk
- 16:00-16:20 Coffee break
- 16:20-17:20 Session IV
- 17:20-17:40 Wrap up and discussion


## Practicalities

- Fill out the online attendance form
- We will compose an attendance list
- We will send all registered attendees a copy
- For presenters: Please respect the limit
- Presentation: max. 15 minutes
- Discussion and questions: min. 5 minutes


## EURO 2016 Prediction Competition

- Challenges:

1. Predicting individual match outcomes
2. Predicting tournament elimination

- Datasets:
$\rightarrow$ Countries: rankings and points
$\rightarrow$ Players: age, market value, basic statistics, ...
- Period: 1 March - 10 June


## Predicting match outcomes

- Task: For each possible match, provide a probability distribution over the outcomes
- Example: 50\% team A, 30\% team B, 20\% draw
- Matches: 276 (= $24 \times 23 / 2)$
- Evaluation: multi-class logarithmic loss


## Predicting match outcomes

Multi-class logarithmic loss


## Predicting tournament elimination

- Task: For each country, provide the probability of being eliminated in each stage
- Example: $28 \%$ group stage, $23 \%$ round of $16,20 \%$ quarter-final, $16 \%$ semi-final, $10 \%$ final, $3 \%$ winner
- Countries: 24 (= $6 \times 4$ )
- Evaluation: multi-class logarithmic loss


## Predicting tournament elimination



