FOOTBALL ANALYTICS:

PERFORMANCE ANALYSIS DIFFERENTIATED BY ROLE

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Nowadays, data science covers many areas of our life, and also sport applications. In this context, we focusing on football, and propose an overview about a project in the field of performance analysis (Carpita et al., 2019; Carpita and Golia, 2020) and prediction of football match results (Carpita et al., 2015).

The idea is to adopt a non-supervised approach, thanks some clustering around variables techniques (i.e. KPI: Key Performance Indicator), in order to create some composite index for each area of performance (e.g. technical-mental-physical), differentiate by role (Carpita et al., 2020). The final goal is to help coaches and scouting to take decisions and to evaluate impartially players performance.

In our presentation, we will submit an overview about the results of a preliminary analysis of our technical-dataset: data visualization and comparison between players KPI's performance, differentiated by role.

KEYWORDS: technical player performances, clustering around variables, composite indicators.

References

CARPITA, M., CIAVOLINO, E., & PASCA, P. 2020. Players' role-based performance composite indicators of soccer teams: A statistical perspective. *Social Indicators Research*, online first. DOI: 10.1007/s11205-020-02323-w.

CARPITA, M., GOLIA, S. 2020. Discovering associations between players' performance indicators and matches' results in the European Soccer Leagues. *Journal of Applied Statistics*, online first. DOI: 10.1080/02664763.2020.1772210.

CARPITA, M., CIAVOLINO, E., & PASCA, P. 2019. Exploring and modelling team performances of the Kaggle European Soccer Database. *Statistical Modelling*, 19(1). DOI: 10.1177/1471082X18810971.

CARPITA, M., SANDRI, M., SIMONETTO, A., & ZUCCOLOTTO, P. 2015. Discovering the Drivers of Football Match Outcomes with Data Mining. *Quality Technology & Quantitative Management*, 12(4). DOI: 10.1080/16843703.2015.11673436.