

## ARCHETYPAL ANALYSIS ON THE EVALUATION OF MOVIMENTATION OF SOCCER PLAYERS

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- **ABSTRACT:** Archetypal Analysis is a multivariate technique commonly used to reduce the size of data through convex combinations. As the analysis mainly uses the extremes of the mass of data as Archetypes, this paper presents a way to use this technique to evaluate the movement of a player or a group of soccer players, considering the geographical coordinates (x,y) as the original variables. Were used fictitious data generated from a similar tactical scheme used by the Brazilian soccer team during the FIFA World Cup, held in Brazil in 2014 results show for it, that this way of using the Analysis of Archetypes can be useful for technical soccer, to analyze the performance of his team after a match. Moreover, such analysis can be performed taking focus a player or group of players (in particular, all holders except for the goalkeeper).
- **KEYWORDS:** Archetypal analysis; multivariate analysis; statistics on sport.

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