# Tactical Trends Analysis

## *Project Proposal*

Supervisor: Hugo Proença

## 1    Objetives

Embarking on a rigorous inquiry, this project seeks to conduct an exhaustive examination of the historical and contemporary tactical dimensions characterizing the performance of a Football Club. By meticulously dissecting past and present tactical trends, scrutinizing individual player contributions, and assessing adaptive strategies employed against a spectrum of opponents, our analysis aspires to provide an intricate understanding of the club's on-field dynamics. Beyond mere numerical evaluations, we aim to leverage sophisticated data visualizations to weave a narrative that contextualizes the team's strategic evolution. Additionally, our study aims to present actionable recommendations for strategic optimization, grounded in empirical insights derived from the thorough examination of tactical nuances. This comprehensive exploration is poised to deliver a nuanced and strategic roadmap for a Football Club, enhancing their on-field performance and strategic decision-making for sustained success.

## 2    Work Plan

**T1**: Study of the existing techniques and Framework Design
**T2:** Data Collection and Match Analysis
**T3:** Break down individual player contributions to the team's tactical strategies.
**T4:** Tactical Adaptations and In-Game Decisions
**T5:** Report writing.

## 3    Academic Prerequisites

• Interest about Artificial Intelligence and Machine Learning topics.

• Programming skills *Python* (+ *Keras or Pytorch)*.

## 4    Expected Results

- 1 computational prototype
- 1 report

## 5    Contact

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