TACTICS: Tactical Analysis and Coaching of Throw-Ins through Contemporary Statistics

Lead supervisor: Associate Professor Joe Stone

Co-supervisor(s): Dr Ben Strafford

School/Institute: Sport and Physical Activity

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Project summary

Performance analysis research in football continually evolves to investigate contemporary tactical developments across European football competitions. Recent examples from our research group include the effect of removing the away goal rule in the UEFA Champions league (Kubayi & Stone 2024), the role of the goalkeeper in attacking play in the women's game (Casal, Stone & Losada, 2023) and investigating the use of throw-ins on performance outcomes (Stone et al., 2021; Stone et al., 2024).

This internship project is a unique opportunity to contribute to a series of on-going research projects aiming to advance professional football tactics through data analytics. The main focus will be supporting the development of research in the area of Throw-Ins. Until recently this set-play has been an under researched area in football. Stone et al. (2021) was the first to examine throw-in tactics on performance outcomes within the English Premier League, with this research leading to significant media attention and impact of the coaching process. The research team now have access to extensive tactical event-based data sets across European Leagues with the aim to expand upon their current publications (e.g., Stone et al. 2021; Stone et al. 2024) on this topic area. The intern would work with the research team, in advancing the current analysis methods and metric creation to provide unique insights into this key tactical element of football. This would be achieved using data manipulation and statistical approaches typically performed in data analytics software (e.g. R/Python). The intern will contribute to the findings being written up for peer-review publication and have the opportunity to co-present the work to the teams applied collaborators. The team also have other on-going projects, which the intern can contribute to, dependant on their personal interests and areas for learning (e.g. the development of data visualization/dashboards, big data projects in badminton).

Specific skills and experience required for this project

Please also refer to the advert on our jobs pages for the person specification for these internships

Essentials

- A strong academic background with a degree (or working towards a degree) in a relevant discipline area (e.g., Sport Science, Data Analytics)
- Ability to learn independently with strong problem-solving capability and innovative thinking
- Knowledge of contemporary performance analysis literature in football/invasion games

- Experience (or keen interest to learn) R/Python or other appropriate computer programming language/s
- Excellent verbal and written communication skills
- Excellent time management, attention to detail and organisational skills

Desirable

- Practical experience of sport data analysis either in a professional or academic capacity
- Knowledge and experience of working with large data sets and/or databases such as wyscout and statsbomb
- Experience of running inferential statistical analysis

Project location

Collegiate Campus

Attending SHUs collegiate campus, in Sheffield would be required at times during the internship for team meetings. However, some working hours can be done remotely. The specific working arrangements will be agreed with the successful candidate.

Project delivery

This project can be delivered on a full-time or part-time basis