

Spatiotemporal pattern analysis of soccer player trajectories

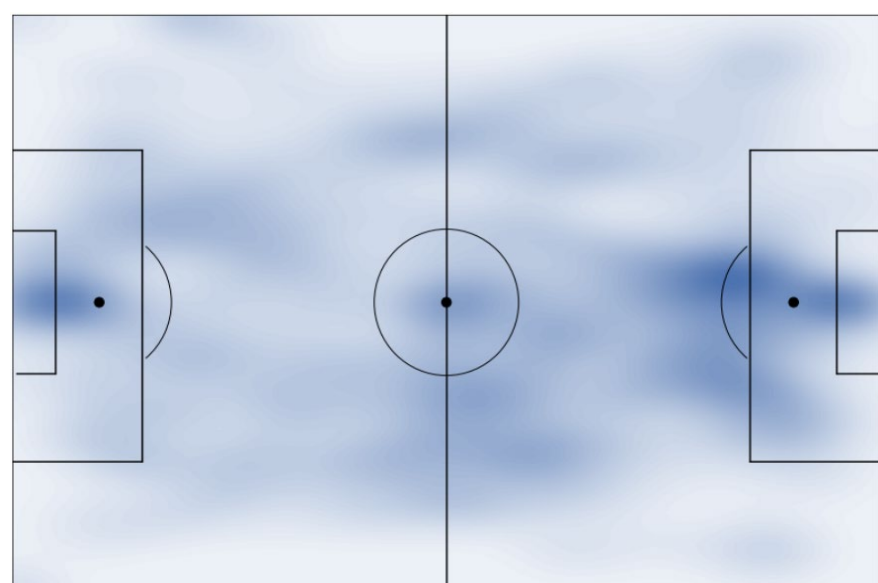
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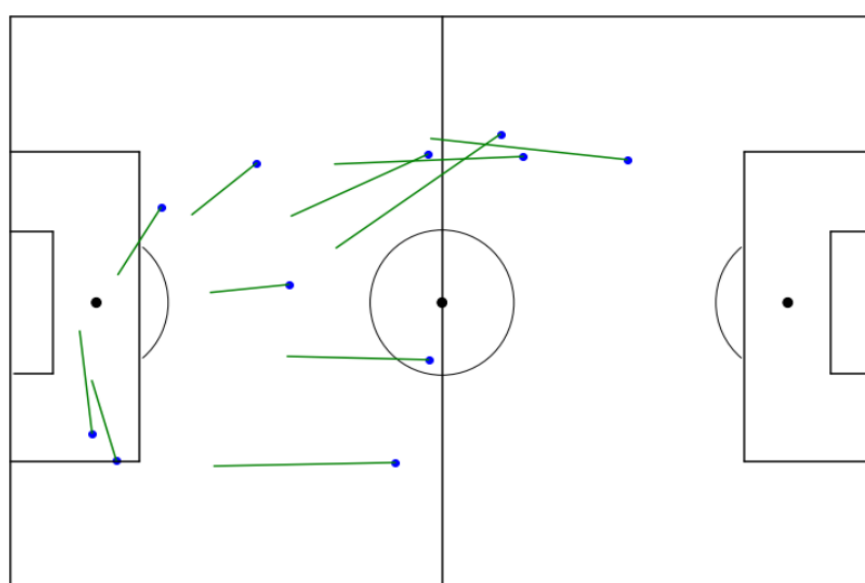
Project Objectives:

This project aims to explore methods to improve post-match analysis of soccer players' individual and team performances through visualisations and analyses. Visualisations allow teams to gain insights into their performances at a glance from different aspects. The analyses conducted include individual players' speed, teams' centroid, and pitch control.

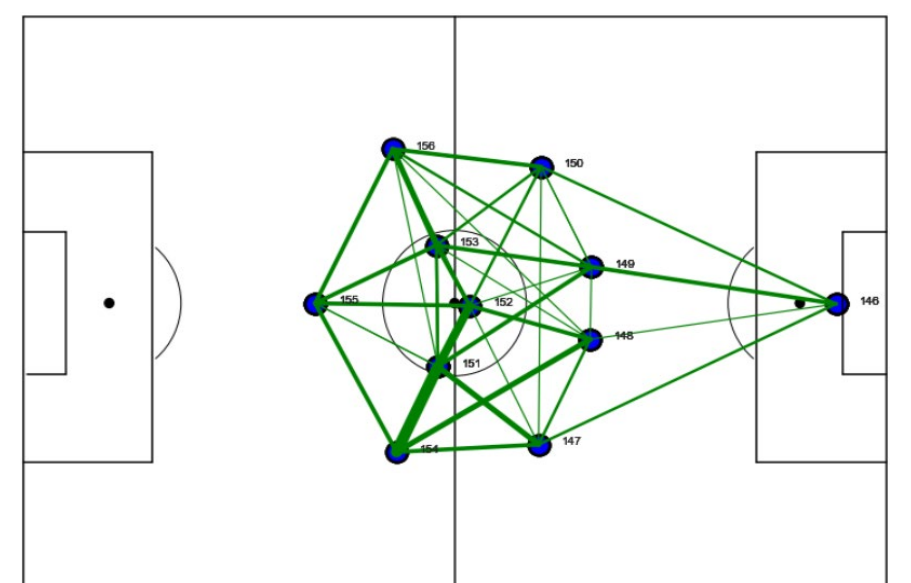
Visualisations:



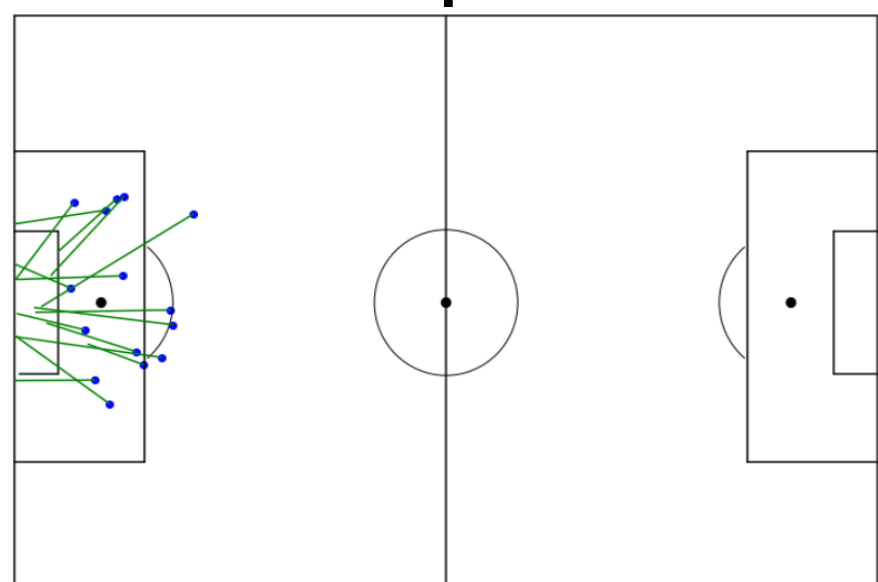
Heatmap of Ball



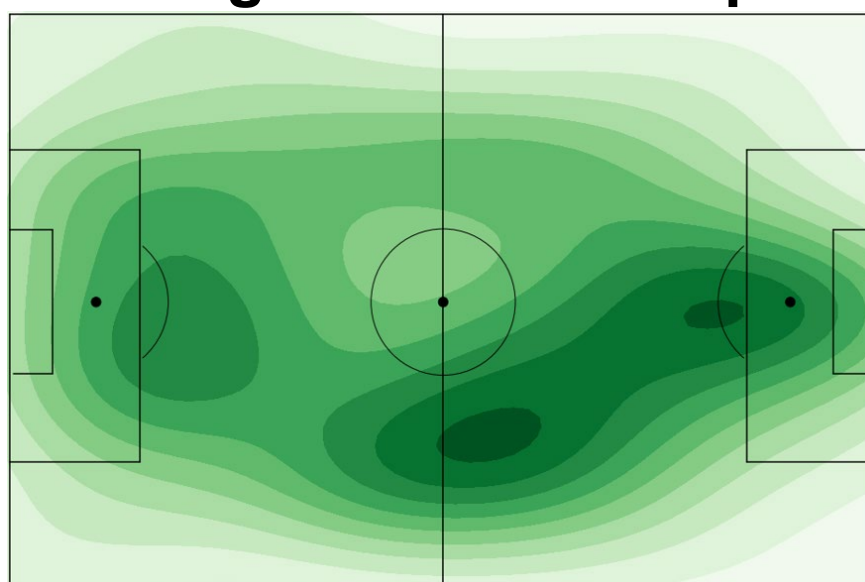
Progressive Pass Map



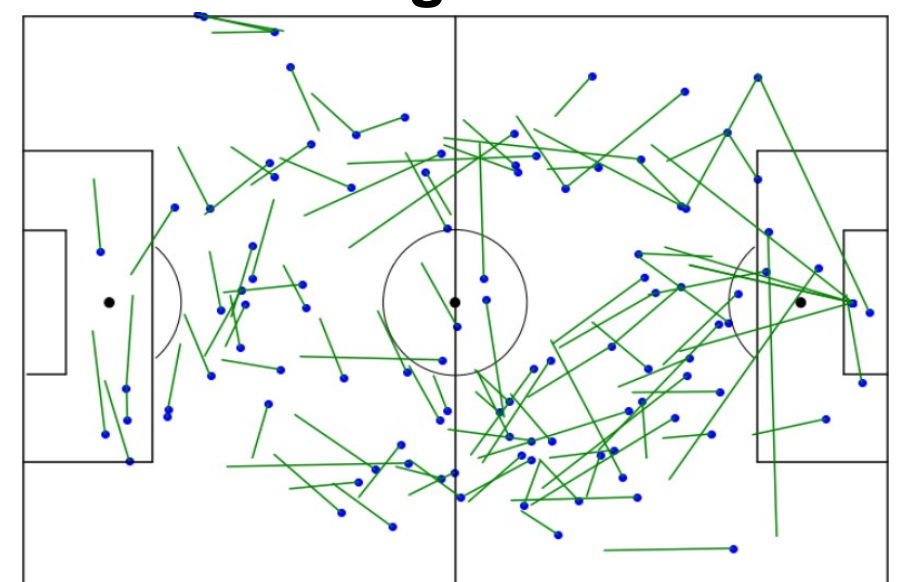
Passing Network



Shot Map

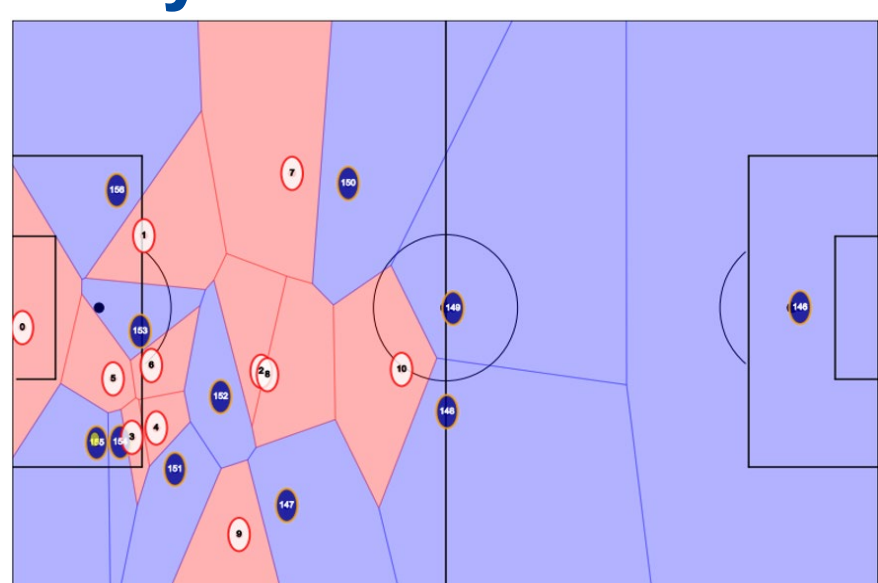


Heatmap of Atomic Event

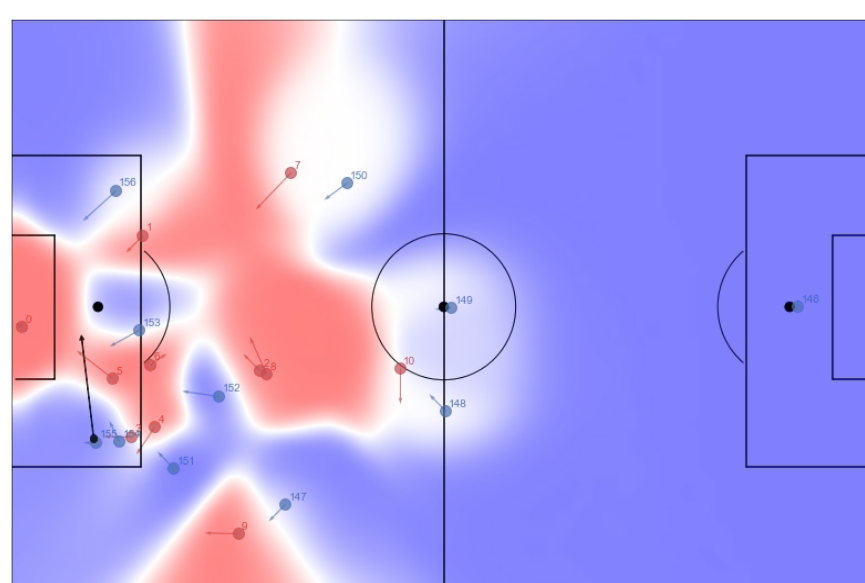


Pass Map

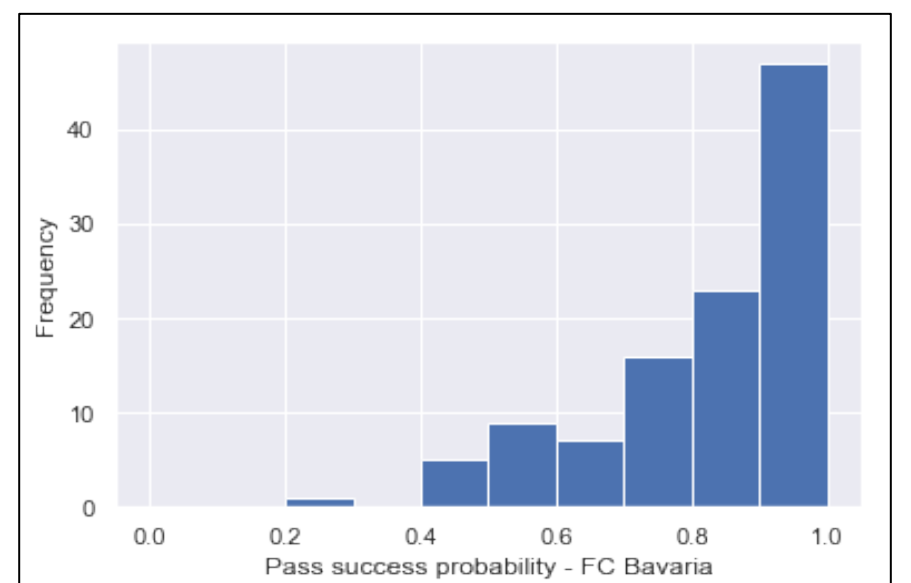
Analysis:



Voronoi Analysis



Pitch Control Model



Pass Success Probability