Initial Proposal Form – 2021/22

Programme of Study:	MSc Computer Science FT
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Potential Supervisor:	Mr. Hazar Emre Tez

Proposed Title:

The evolution of the National Basketball Association through data analytics

Proposed Aim:

Every NBA team currently employs an analytics department as a part of their front office. Player and ball movement data is collected on a second-by-second basis during a game. My aim is to compare how the NBA has changed after the implementation of data analytics. Doing this can better determine positions and on court plays that may either become obsolete or improve a team's chance of winning as the game evolves.

Rationale

A player such as Derrick Rose who was once an all star and the leagues youngest ever MVP lost his status and athletic abilities due to recurring injuries. Analysing the number of back-to-back games being played along with the players previous injuries can help a team decide when to manage their load and thereby prevent injuries. Line-ups and plays can be changed based on each opponents abilities and shot selection can be refined by analysing field goal percentage at various spots on the court. Understanding these variables and noticing trends can help coaches and trainers understand their rosters abilities and make wise game time decisions.