

## Proposal for ‘Design Project on Sports Analytics’

### Abstract

Sports analytics is a field of data science and analytics that focuses on sports decisions and performance optimization. In my study project (performed in my 4th semester), I found that the current research in sports analytics primarily focuses on **correlation** rather than **causation**. However, there is some existing causal research performed on the aspect of ‘Injuries Prediction’. This concept is to be implemented for other aspects as well. There are many causal analysis methods such as **Granger Causality**, **Rubin Causal Model**, and **Judea-Pearl Model**. These are primarily used for *econometrics*, and I believe that they will be promising if implemented in the field of sports analytics.

### Objectives

- Continuing the research of 4th semester study project
- Identify the concepts used for injuries prediction, and apply for other aspects as well
- Implementation of learnt concepts using Python
- Identify and implement an insightful analysis for the upcoming Qatar World Cup 2022

### Side Note

As there is not much existing causal research on Sports Analytics, I’ve found it hard to get resources. Hence, I do not have an exact topic to focus on.

Moreover, I intend on contacting sports clubs (preferably football clubs) if they can help me out.