



DataFest 2019 Findings

“Name in Beta”

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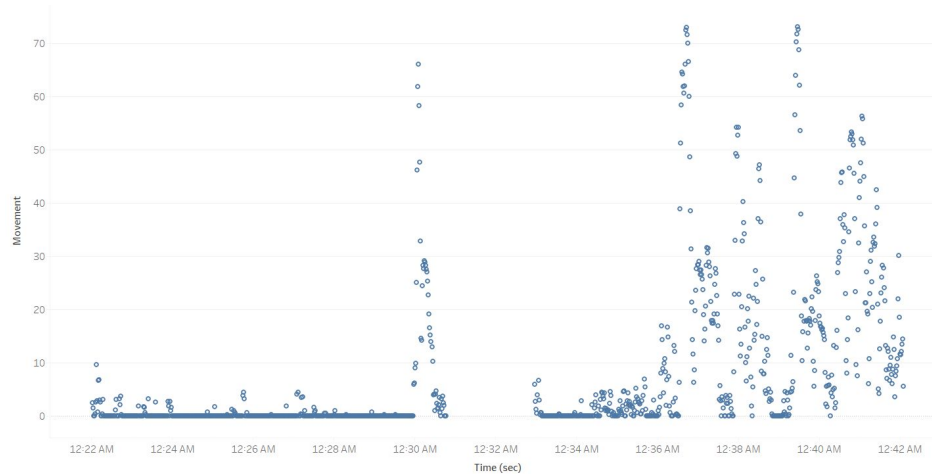
Problem Statement

- How do we predict fatigue?
- How can we use fatigue to predict game outcomes?



Methods

- Best linear regression:
 - Fatigue per player per day \sim Soreness + Desire + Irritability + SleepHours + SleepQuality
- Weighted team fatigue calculation:
 - $\sum_i (\text{PlayerTime}_i / \text{TotalTeamTime}) * \text{PlayerFatigue}_i$

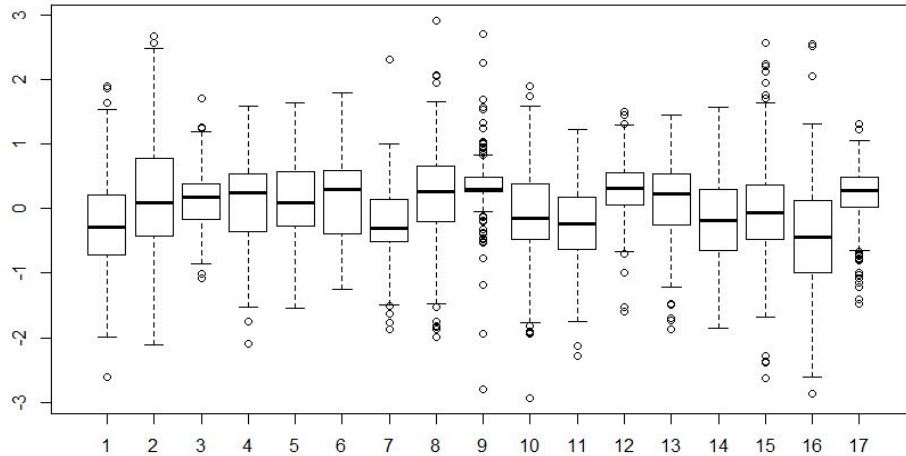


The plot of sum of Time Second for Time Second.

Results

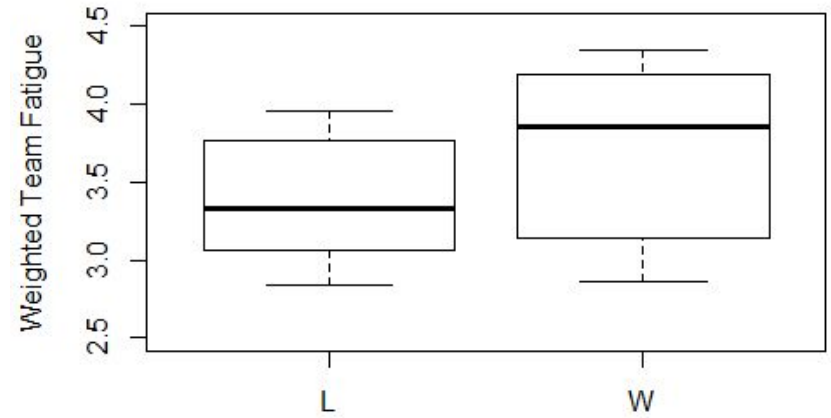
- Teams should focus on Soreness, Desire, Irritability, SleepHours, SleepQuality
- Less fatigue leads to higher chance of winning
 - Based on only 38 observations of games

Residuals Plot for Fatigue of each Player



PlayerID

Box Plot of Weighted Team Fatigue by Win/Loss



Game Outcome