

How to Measure Fatigue and What We Can Do with the Existing Measurements

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Substitute for the Self-reported Fatigue

- Median speed
- Reasons why we choose this as a substitute:
 1. High intensity
 2. Visualization

Identification of Explanatory Variables

- Duration (Frame ID)
- Load (Median load detected by the accelerometer)
- Impulse (Median absolute value of change in speed divided by change in time)
- Jump (Median acceleration in vertical direction)
- Interaction terms

Models and Results

- Multiple Linear Regression Model
 - R-squared
 - Statistical significance

Reflections and Further Investigations

- How to improve individual's performances during games
 - Monitor jump height and control for it
 - Help to decide which player to play the second half of the game/game later
- More inclusion of training data and identification of difference between baseline and competition phase
- Application of more models with higher accuracy or more direct insights [demo video](#)