ABSTRACT

REFLEX tracks athletes’ performance during practice. Our algorithms identify each user’s strengths and weaknesses to provide data-driven recommendations to enhance future practice sessions and optimize training.

MOTIVATION

Leverage wearable devices in order to maximize athletic performance.

SYSTEM OVERVIEW

WALK-THROUGH

ENTER BASIC USER INFO

RECORD WORKOUT SESSION

FINISH WORKOUT

USER LOGS ATTEMPTS

ANALYZE PERFORMANCE AT A GIVEN POSITION ON THE COURT

EVALUATE PRACTICE SESSION AS A WHOLE

RECOMMEND FUTURE WORKOUT

ANALYTICS OVERVIEW

PERFORMANCE ANALYSIS

\[ P(X = x) = \left( \frac{\Gamma(x_0 + \alpha + \beta + n - 2)}{\Gamma(x_0 + n - 2)} \right) \frac{\Gamma(x_0 + \alpha + \beta + n - 2)}{\Gamma(x_0 + \alpha + \beta + n - 2)} \]

\[ \alpha' = \alpha_0 + \alpha \cdot \lambda \]

\[ \beta' = \beta_0 + \beta \cdot \lambda \]

\[ \lambda = \frac{1}{1 + e^{b_0 - \beta}} \]

\[ b_0 = 4 \]

WORKOUT RECOMMENDATION

WALK-THROUGH

SYSTEM OVERVIEW

ANALYTICS OVERVIEW

PERFORMANCE ANALYSIS

WORKOUT RECOMMENDATION