An Intelligent Forecasting Model for Rowing

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***Abstract*—According to the current International Rowing Federation, the distance from the rowing competition is 2000 meters, the match time depending on the different items. The boating operation relies on the paddle hand of the boat to push the boat forward quickly with the work done by the paddle hand. As a result, boating wants to pass the endpoint at less time in a specified distance, and must increase the frequency of rowing per minute on the ship as a power paddle. Increasing the strength of each paddle allows the ship to paddle at the most force of each oar. Each oar hand puts forward the required quality requirements, that is, strength, speed, muscular endurance and rhythm. At present, many scholars have put forward many methods to study sports monitoring at home and abroad, but this sport is rarer in rowing.**

Therefore, this study will present the intelligent prediction of rowing performance model to predict the performance of the contestants, including:

(1) We use four weight methods to defuzzify: (a) dynamic weight forecasting, (b) equal weight, (c) sequential weight, and (d) trends weight.

(2) Finally, the forecasting value is optimized by the adaptive adjustment method.

Finally, this study uses the public information provided by the International Rowing Alliance website as a training prediction model. The test results are compared with the weight-cutting and forecasting methods.

***Key words* — Rowing, Fuzzy, Time series, Forecasting.**