

## **AVOIDING OVER-TRAINING WITH DATA MINING IN PROCESS OF MOUNTAIN BIKING TRAINING**

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Data mining is a promising tool for discovering the knowledge from data. Many data mining tools were developed in the past, e.g, association rule mining, clustering, classification, regression and more. Nowadays, association rule mining has become a very popular technique for mining association rules from databases. Using this technique, we can discover relations between variables in very large databases. On the other hand, an expansion of massive sport events (e.g. marathons, triathlons, cycling events, swim marathons) has been increased. Therefore, many new coming professional as well as amateur athletes wish also to compete on a high level. Since they are not familiar with proper training, eating, sleeping, and resting, they encounter some problems, like illness, over-burning, injuries and also over-training. Over-training is still one of the biggest problems tackling the sports training. It is visible especially by the freshman's and amateur athletes. So far some practical and theoretical solutions for avoiding over-training have been proposed in the literature. In this presentation, we propose a novel solution based on data mining to cope with over-training detection automatically. We show some real experiments and simulations which were conducted on a real datasets. Results are very promising and idea is worth of further investigations.