Sports user modeling based on GPS data

1 Introduction

Wearable is the new trend, the location data of the users has already flooded to us. Among the mobile applications, sports management APPs heavily depend on recoding the users positions along their workouts. In this project, we try to answer following questions:

- Is it possible to generate good users fingerprints (features) based on the telematics data? With the fingerprints, we could do many things such as users clustering, users recommendations. It is important because it is the corner stones of further applications.
- Can we design or find a good model to differ users based on the routes GPS data? If this is true, a comparison study of different group of users could reveal insights on the human sports patterns.

A simple search in google scholar returned noting on the same topic.

2 Resources

In 2014, a similar Kaggle challenge [1] tried to find good features and models to differ drivers based on their telematics data. It provide us many good ideas, hands on experience and valuable tips.

Github repositories [2] of the attendants of the challenge will give us a boost in the early development.

[1] https://www.kaggle.com/c/axa-driver-telematics-analysis/forums

[2] https://www.kaggle.com/c/axa-driver-telematics-analysis/forums/t/12849/github-repos-now-live