**Artificial Intelligence Capstone Project1**

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1. **Introduction**

The 2024 Paris Olympics are coming just around the corner, as one of the most renowned sporting events globally, the result of the competition is focused by the entire world. I want to see if we can predict the result of the game. Based on this motivation, I collected the historical records of men’s 100 meters as my dataset and explored how machine learning and artificial intelligence can use the features to make predictions and improve sports.

1. **Dataset**
   1. Introduction

This is a dataset of the men’s 100 meters events in Olympic games from1948 to 2020.

* 1. Content
     1. Compositions

*Name*: string, name of the competitor

*Nation*: int, code of the country from the following nation dictionary.

*Weight (kg)*: float, weight of the competitor

*Height (cm)*: float, height of the competitor

*BMI*: float, calculated by the formula

*Age*: float, age of the competitor, calculated from the birthday to the first day the event start

*Year*: int, the year of the event

*Round*: int, round of the event, range from 1 - 4

*Wind (m/s)*: float, wind information

*isHometown*: bool, the venue of the event is the hometown of the competitor or not

*Label (s)*: float, record of the competitor

* + 1. Amount
    2. Conditions
  1. Collection
  2. External source

1. **Methods**
   1. Supervised Learning
   2. Unsupervised learning
2. **Experiments**
   1. Experiments Setting
   2. Experiments result
3. **Discussion**
4. **References**