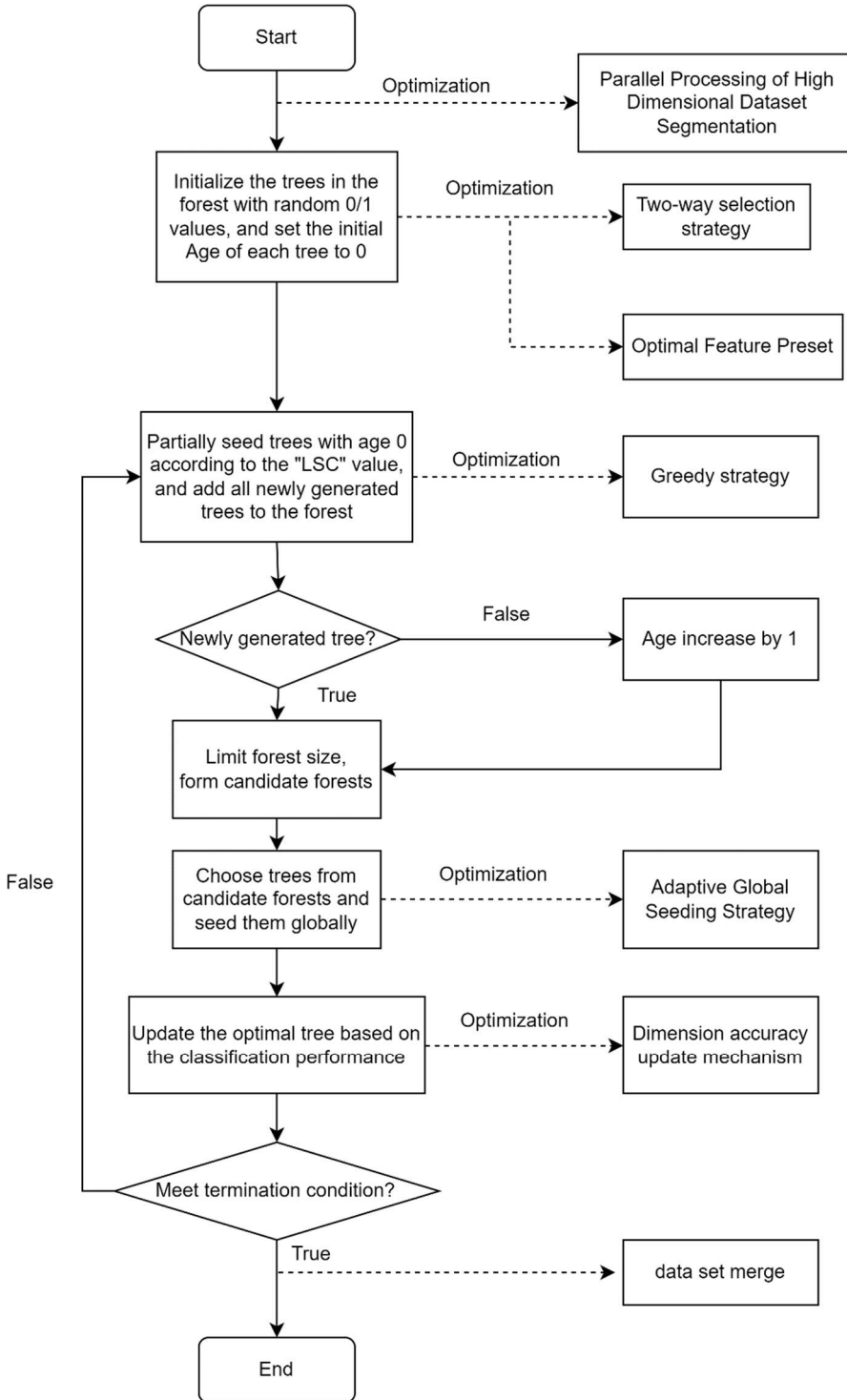


# Realization and Optimization of Forest Optimization Feature Selection Algorithm

## I Model optimization



## **II Optimization**

### **1. High Dimensional Dataset Optimization Strategies**

The optimization of high-dimensional data set adopts the extremely greedy strategy of "Research on the Improvement of Feature Selection Algorithm Based on Forest Optimization" to optimize the classification performance, and adopts the segmentation and parallel processing strategy introduced in "Research on Enhancement and Extension of Forest Optimization Feature Selection Algorithm", and further optimize the segmentation scheme on the basis of the segmentation and parallel processing strategy, so as to greatly increase the operation speed of high-dimensional data sets under the condition of ensuring accuracy.

### **2. Forest initialization strategy**

Utilize the two-way selection strategy introduced in "Research on the Improvement of Feature Selection Algorithm Based on Forest Optimization", and realize the optimal feature selector to further adjust the feature selection on the basis of randomly selected features, and preset the optimal feature by 1/ 2 scale presets.

### **3. Global seeding and updating strategy**

Global seeding adopts the adaptive global seeding strategy introduced in "Research on Enhancement and Extension of Forest Optimization Feature Selection Algorithm". The update strategy adopts the dimensional accuracy update mechanism introduced in "Research on Improvement of Feature Selection Algorithm Based on Forest Optimization".

## **III Summary**

This forest optimization feature selection algorithm combines the optimization algorithms introduced in "Research on the Improvement of Forest Optimization Feature Selection Algorithm" and "Research on Enhancement and Extension of Forest Optimization Feature Selection Algorithm", and improves the algorithm to a certain extent. The feature selection algorithm realizes the optimal feature selector to pre-set the initial features, and the improvement of the high-dimensional data segmentation algorithm improves the rationality of the segmentation points. It has been verified by practice that this forest optimization feature selection algorithm greatly improves the processing ability of high-dimensional data, and improves the feature selection accuracy to a certain extent.