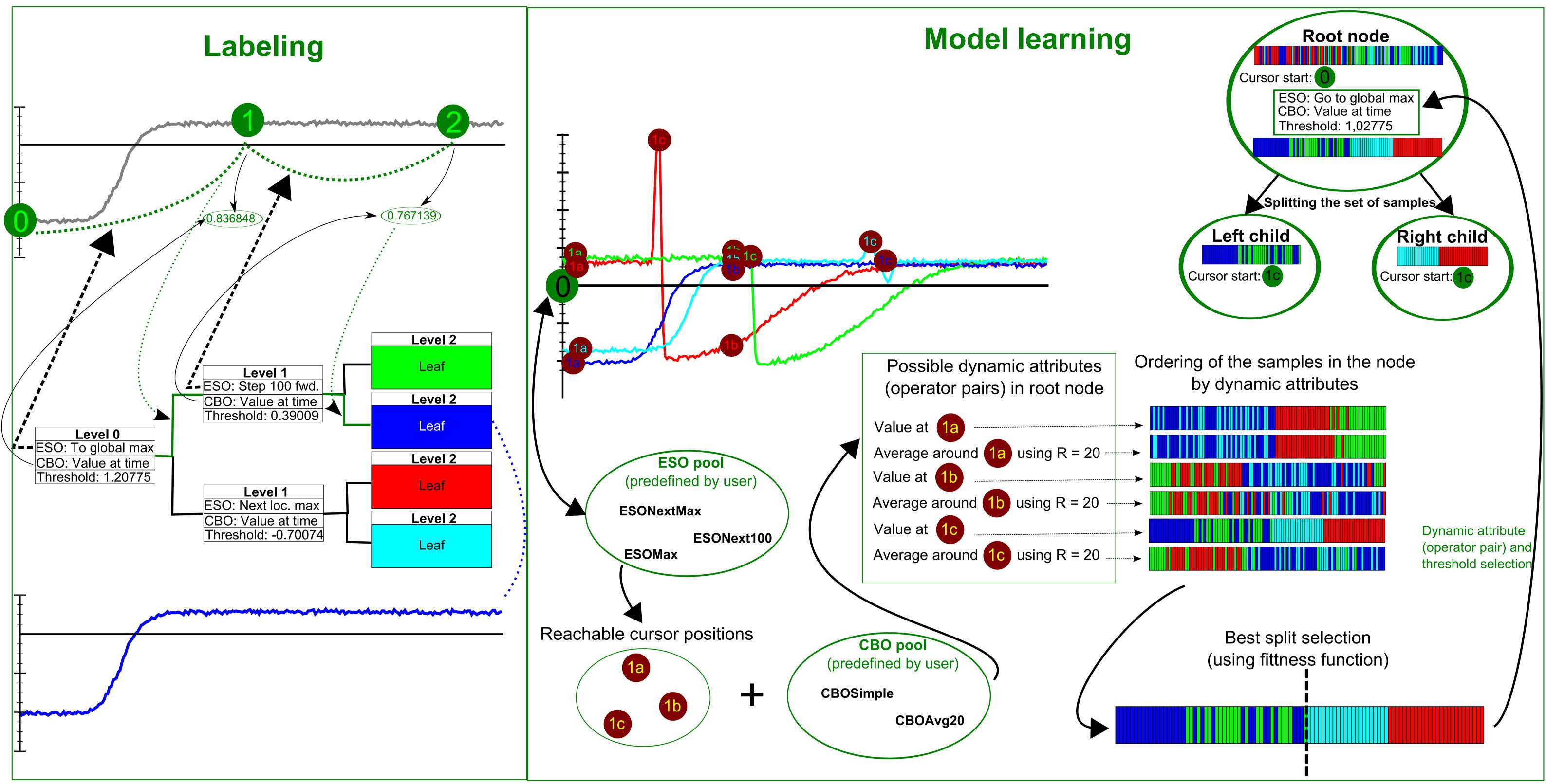
# ShiftTree

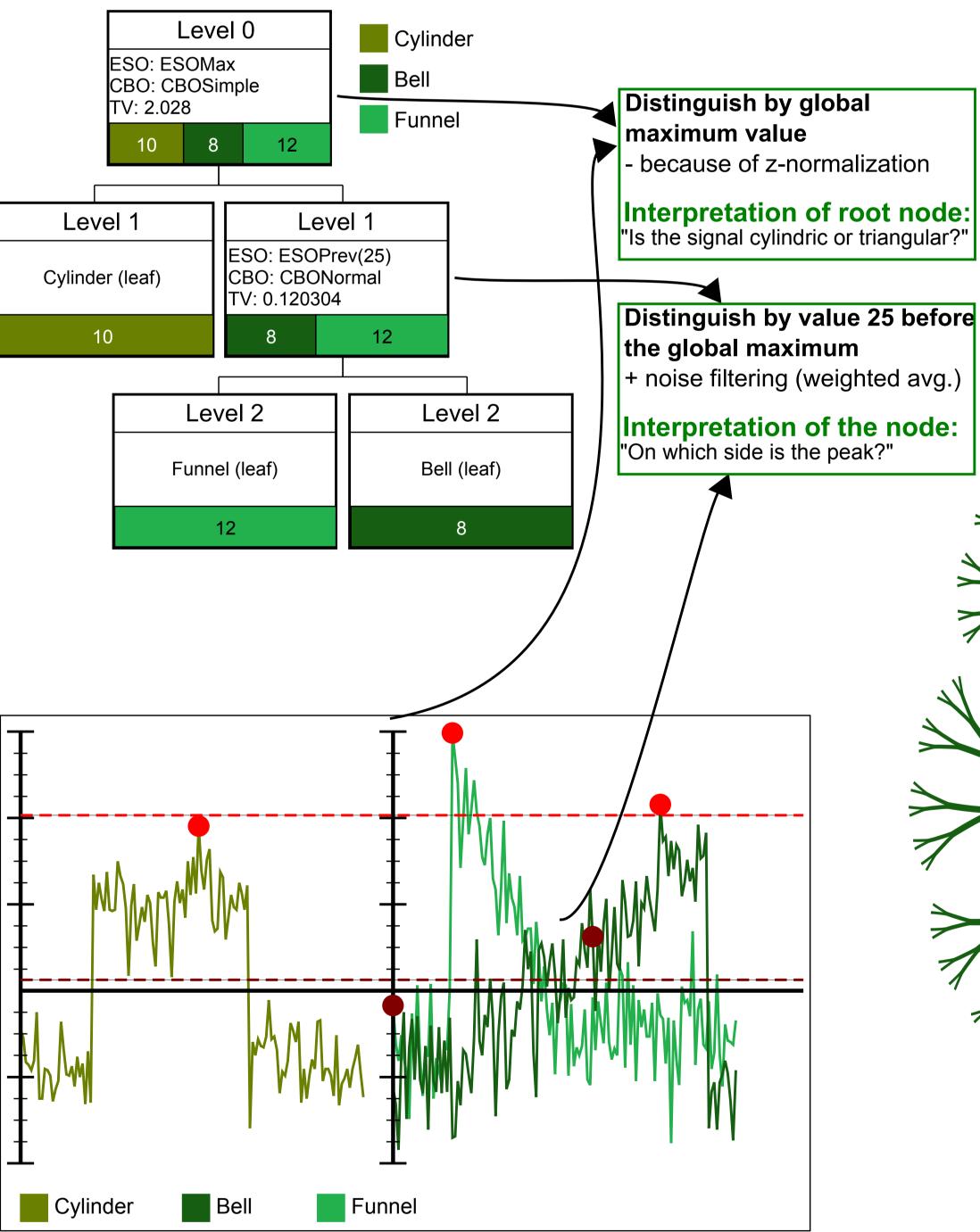
An Interpretable Model-Based Approach for Time Series Classification

by

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## Interpretability



# **Results**

Basic concept: 1. Dynamic attribute creation 2. Using operators for that 3. Two operator families a. ESO: Where to look at? b. CBO: What to observe? 4. Use these attributes in a decision tree

> Advantages: Fast labeling (model based) Interpretable

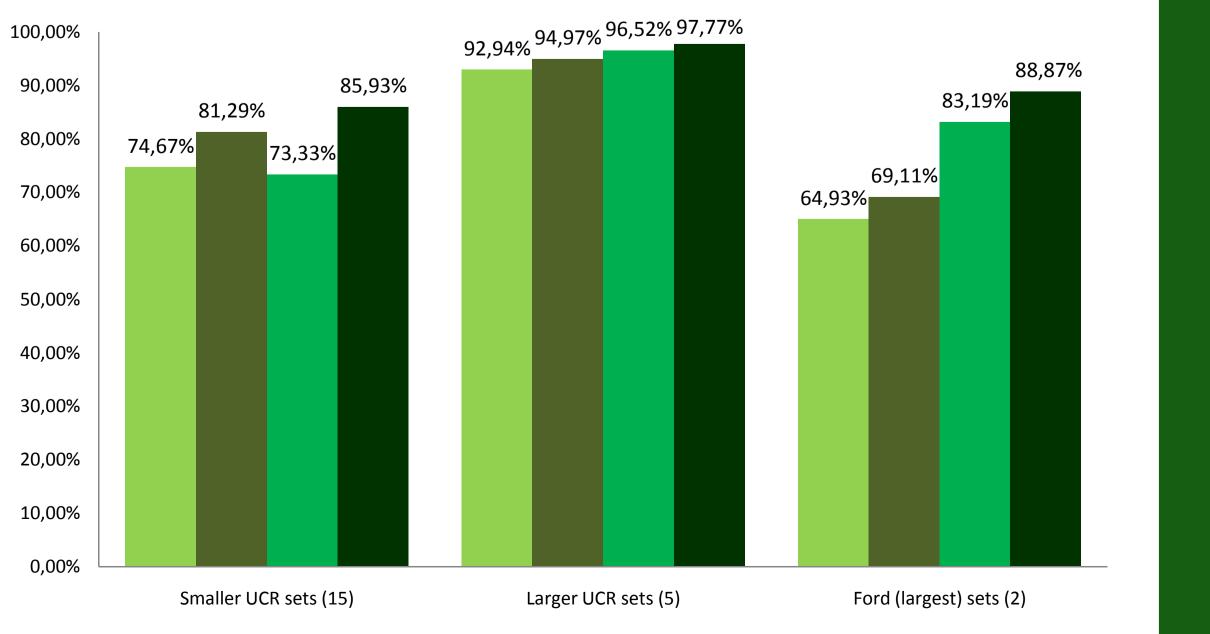
Application domain independent usage Expert's knowledge can be imported Model building time is acceptable

### **Disadvantages:**

non-trivial

## The concept can be easily adapted to other DM probles such as but not limited to:

- stream mining
- graph mining
- semi-structured data mining



■ 1NN Eucledian ■ 1NN DTW ■ ShiftTree ■ ShiftForest

Need of more training samples than instance-based algorithms Defining the operator pool may be