

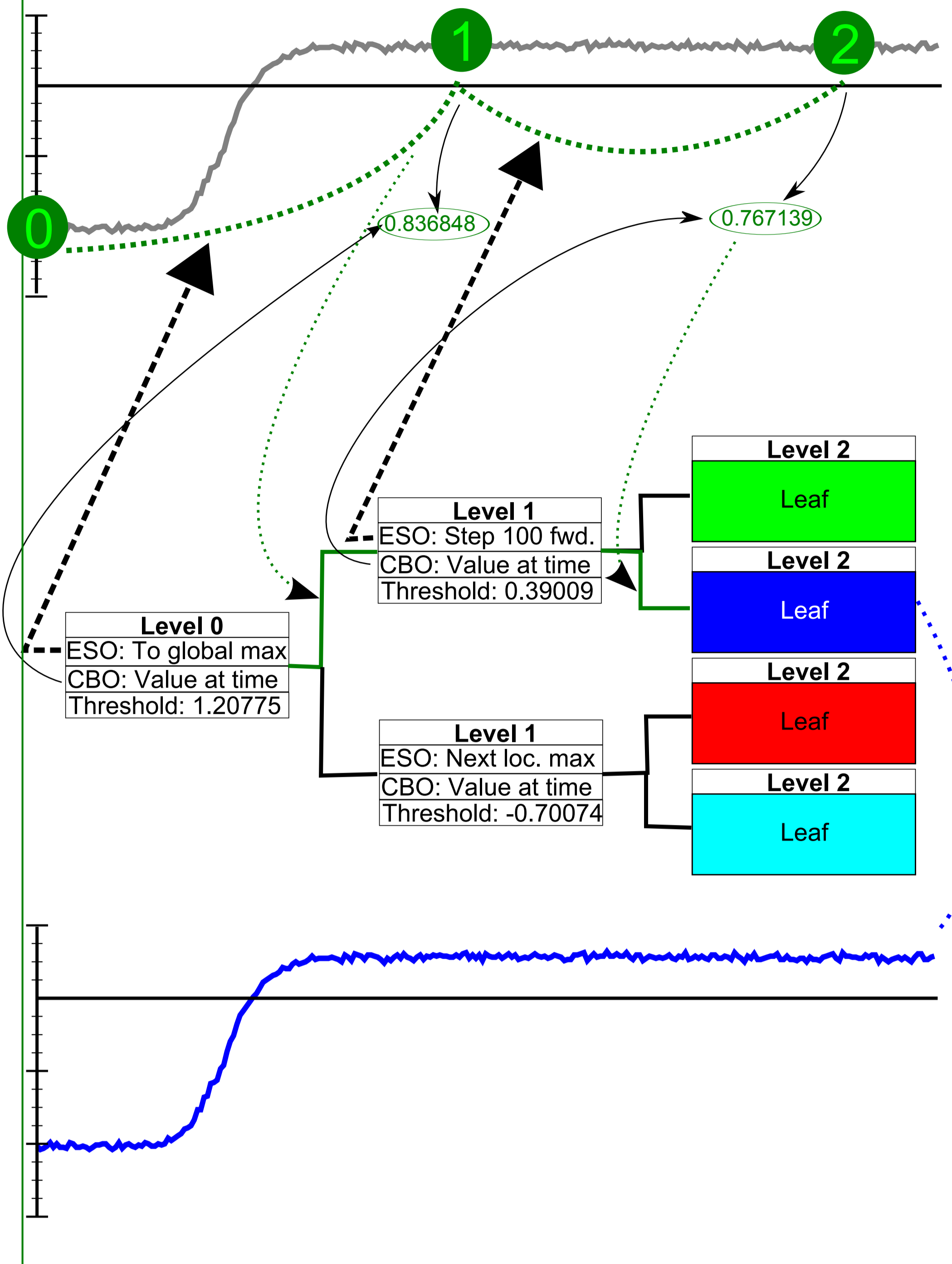
# ShiftTree

An Interpretable Model-Based Approach for Time Series Classification

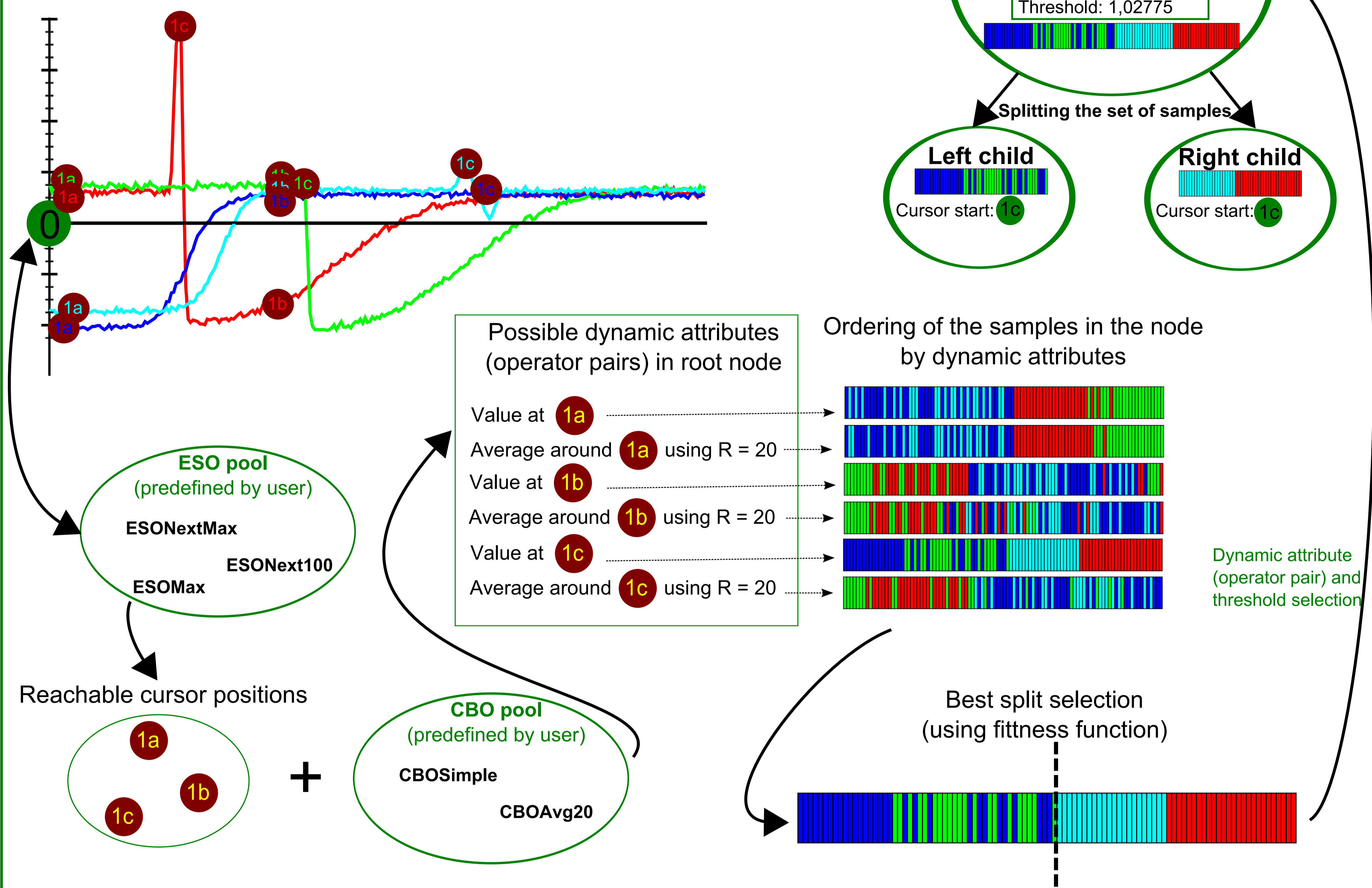
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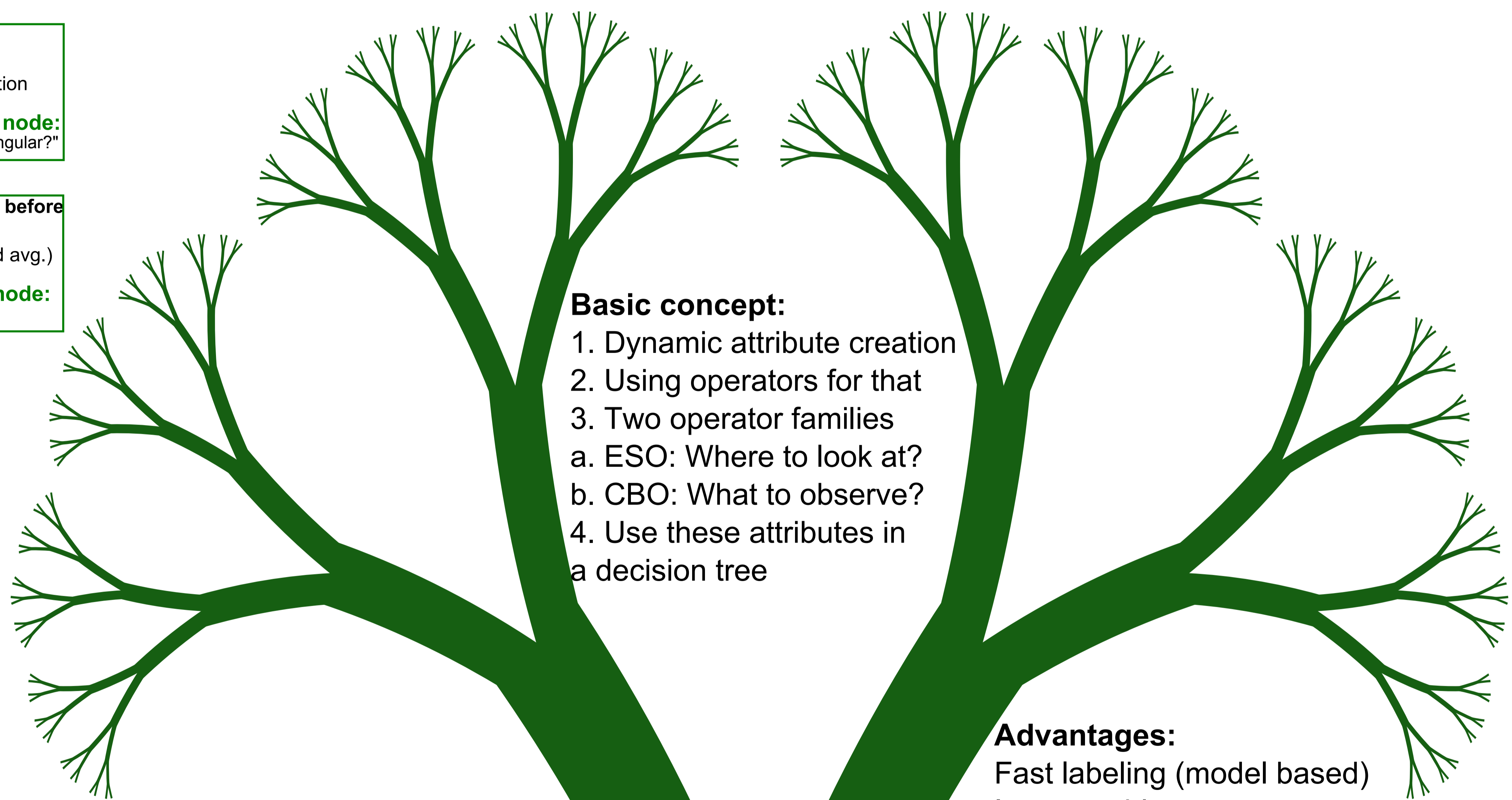
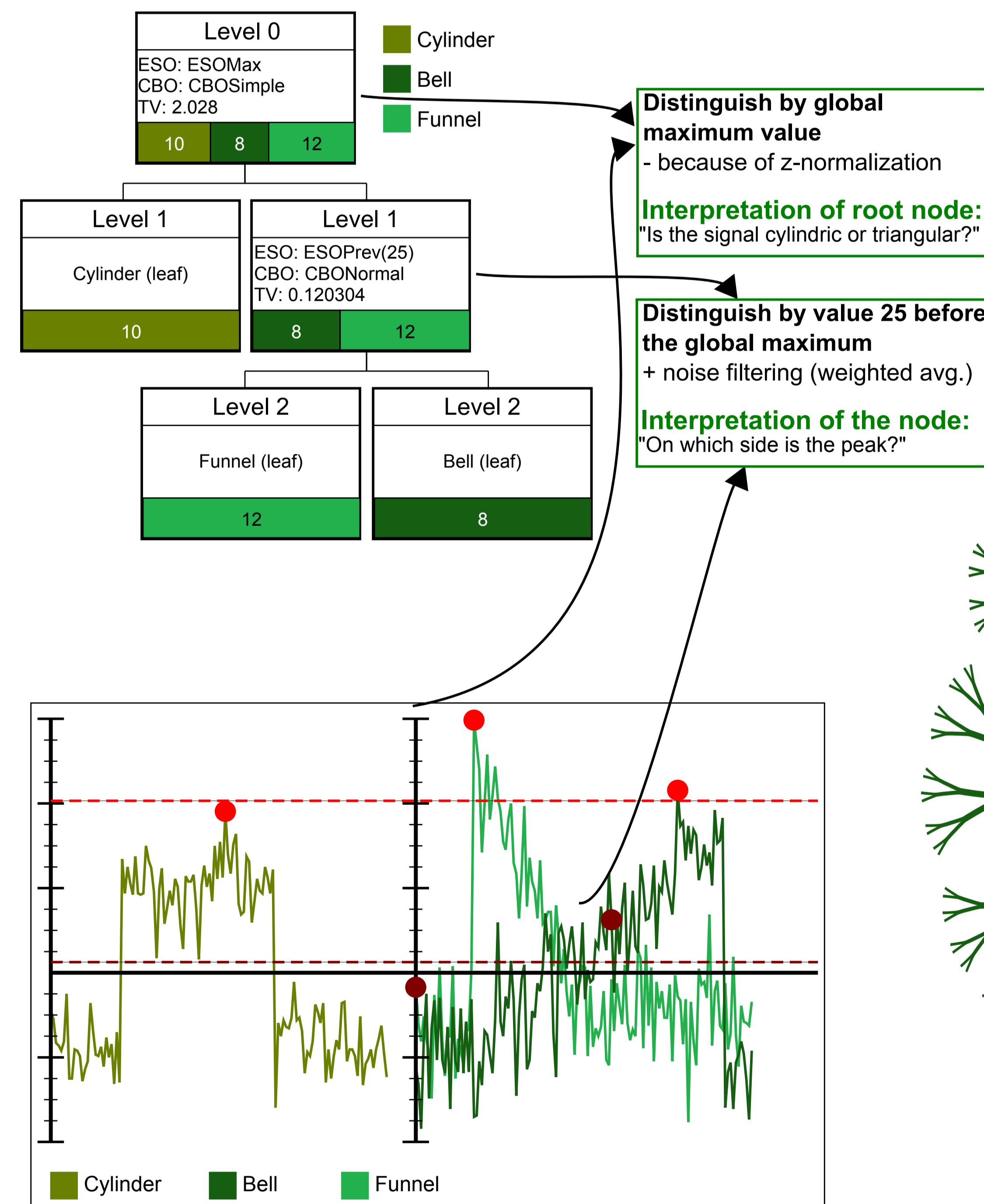
## Labeling



## Model learning



## Interpretability



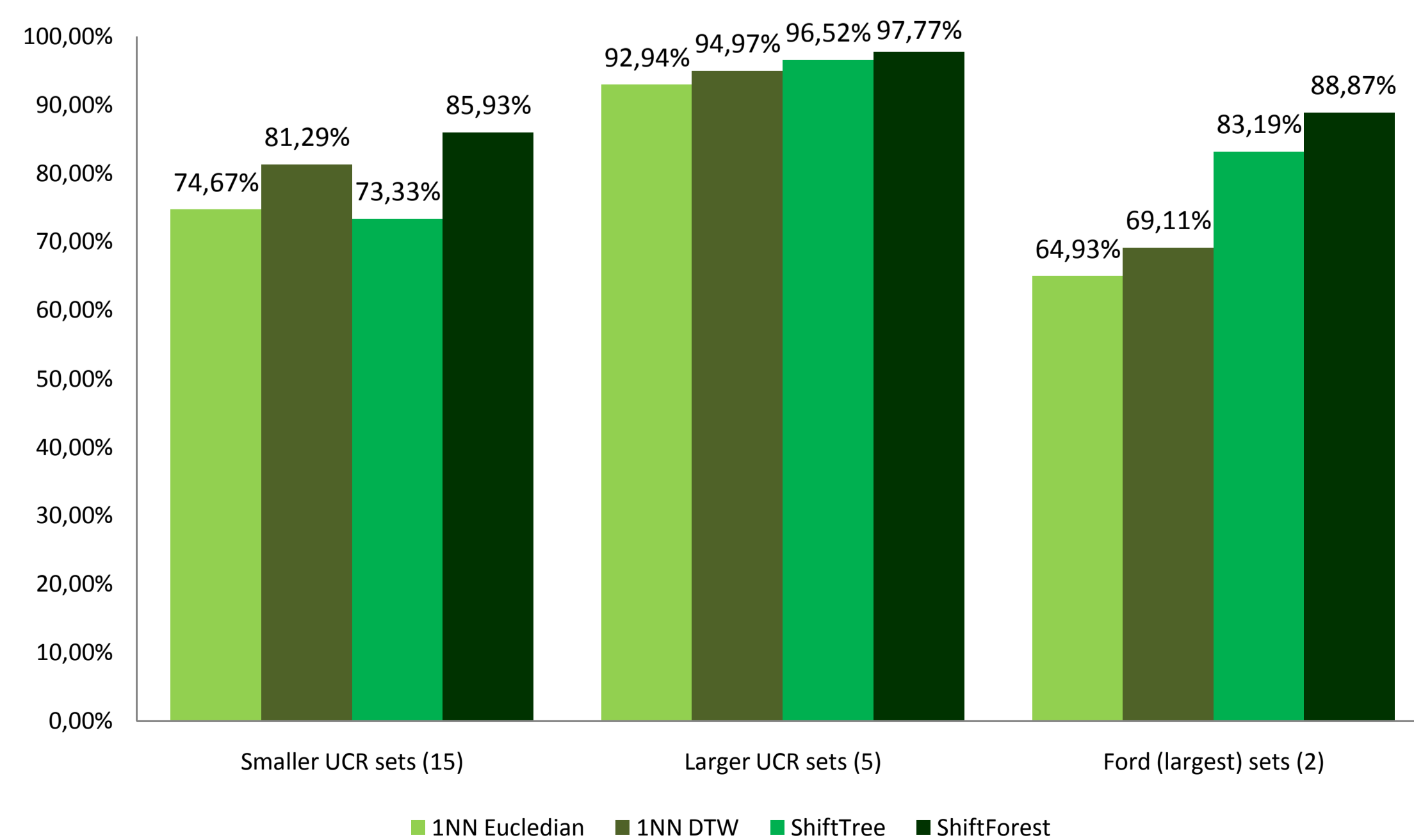
### Advantages:

- Fast labeling (model based)
- Interpretable
- Application domain independent usage
- Expert's knowledge can be imported
- Model building time is acceptable

### Disadvantages:

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

## Results



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

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