Building an explainable model for ordinal classification. Meeting black box model performance levels.

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Plan

1. Research purpose
2. Ordinal classification
3. Dataset
4. Methodology
5. Results
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Research purpose

Ordinal classification

Dataset - Eucalyptus

- OpenML
- 556 observations of 87 variables
- ordinal target: Low, Average, Good, Best
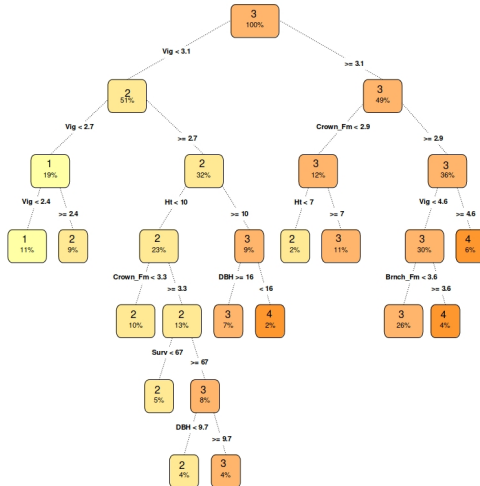- target meaning: suitability for soil conditions

Methodology

Results

Model	AUC	MSE	ACC	ACC1	% Best AUC
Basic rpart	0.8259	0.5284	0.5835	0.9797	95.89%
Regr rpart var-sel.	0.8613	0.4996	0.5815	0.9323	100.00%
Xgboost	0.8590	0.4467	0.6248	0.9873	99.73%
Xgboost small	0.8405	0.4998	0.6044	0.9830	97.59%

Results

Model Explanation

Conclusions