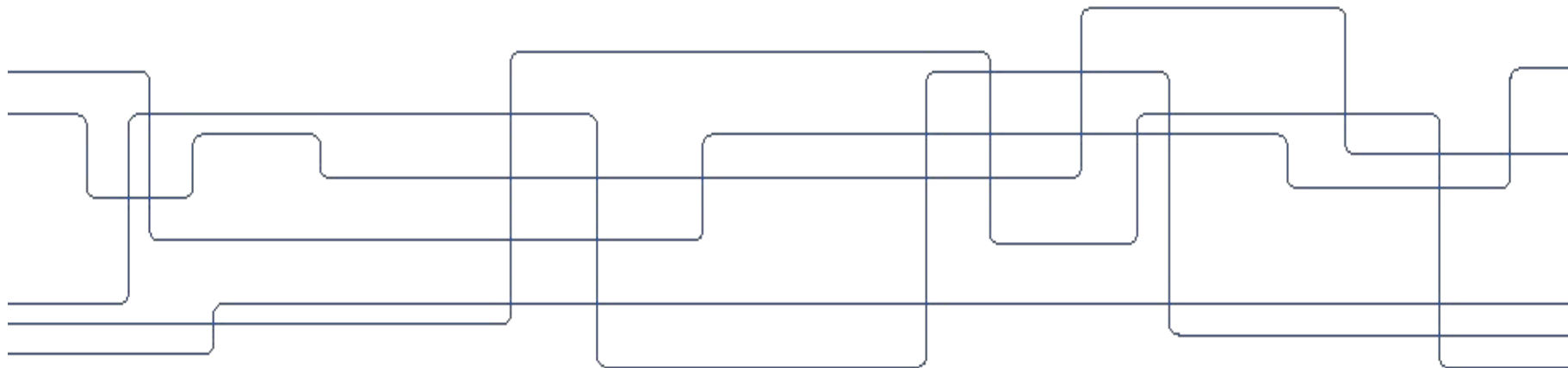




# BAYESIAN LEARNING AND BOOSTING

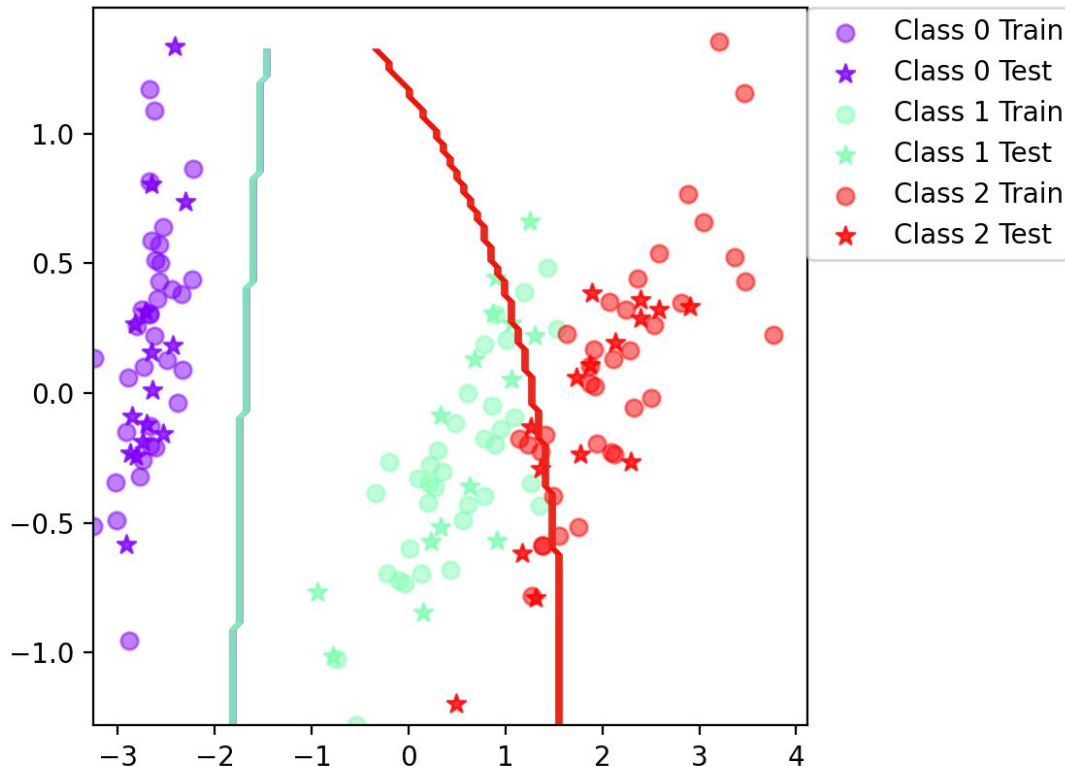
Ivan Klabucar & Simon Langrieger



# Naive Bayes

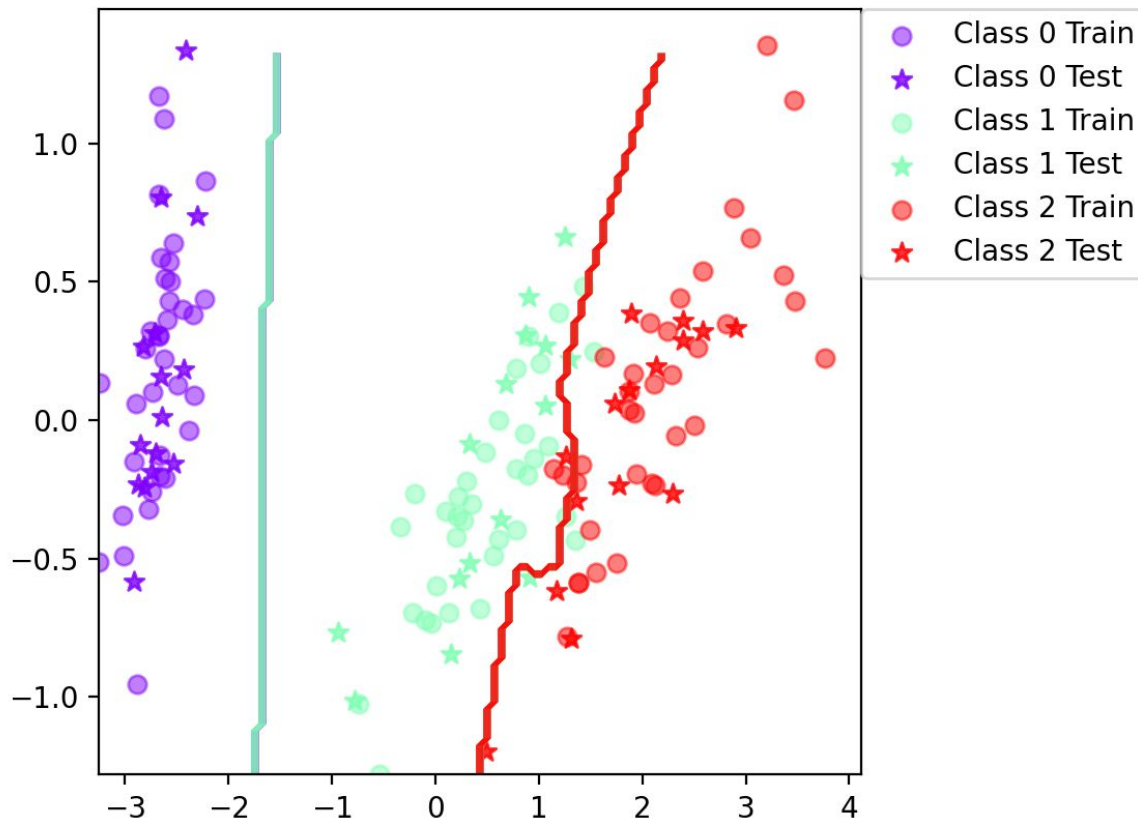
- Mean classification accuracy: 89%
- Standard deviation 4.16

$$\Sigma_k(m, n) = 0 \text{ for } m \neq n.$$



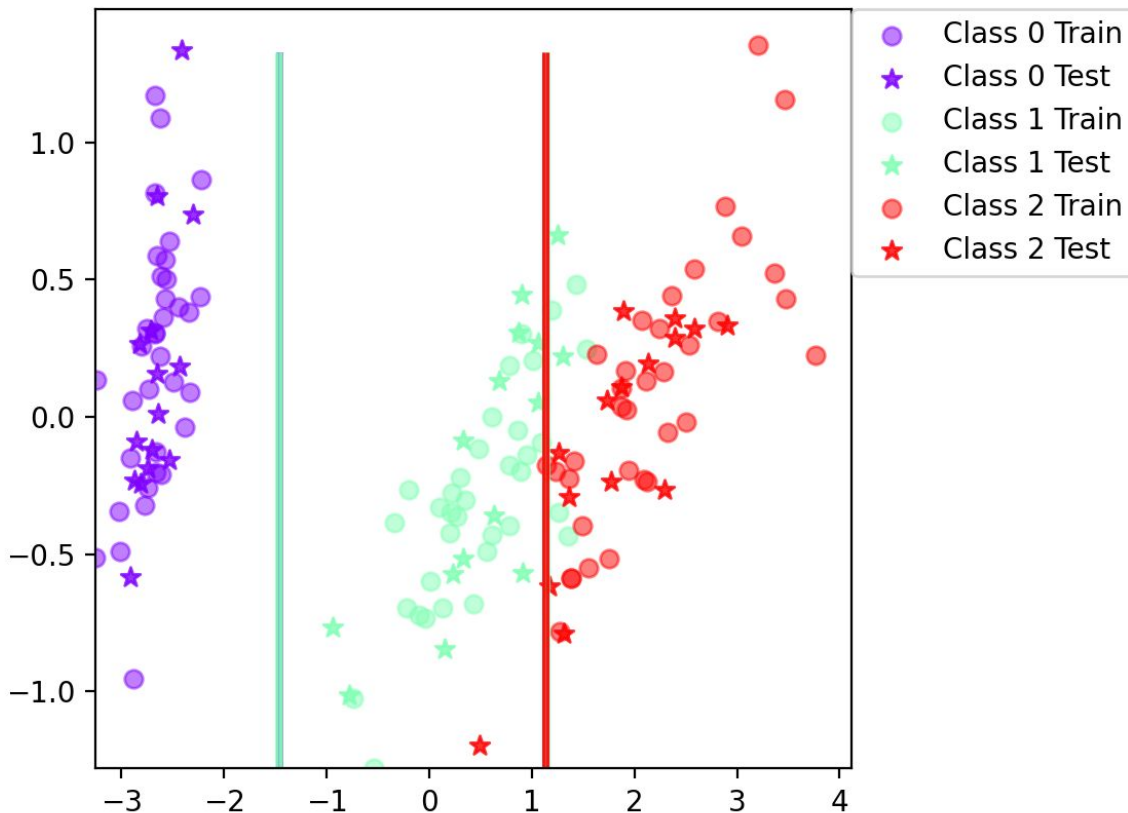
# Boosted Naive Bayes

- Mean accuracy: 94.7%
- Standard deviation 2.82



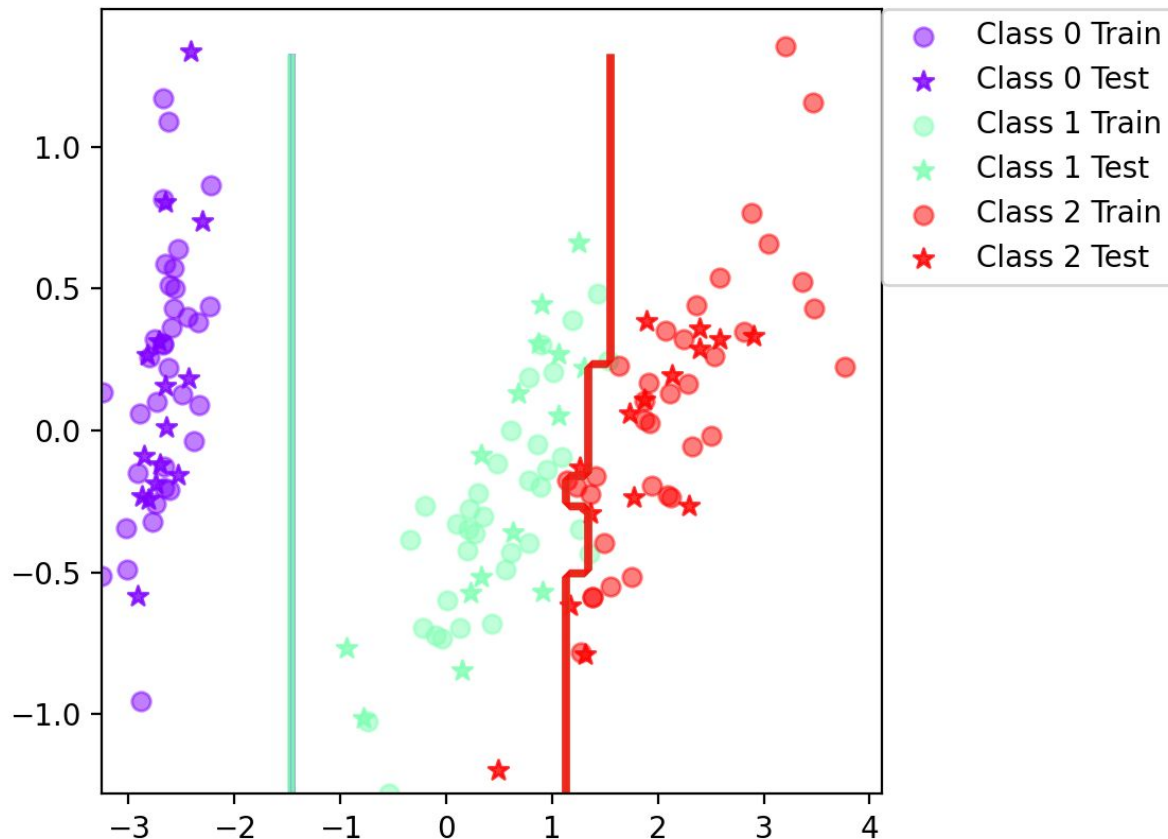
# Decision Trees

- Mean accuracy: 92.4%
- Standard deviation 3.71



# Boosted Decision Trees

- Mean accuracy: 94.6%
- Standard deviation 3.67





# Choice of classifier

- Outliers
- Irrelevant inputs
- Predictive power
- Mixed types of data
- Scalability