Background
Ohio Marijuana Legalization, issue 3, 2015

Data
Message testing data from polling surveys provided by Public Opinion Strategy: demographic info + opinions on the issue + views upon messages.

Goal
Develop microtargeting strategy for the opposition campaign of future, possibly nationwide marijuana legalization issue.

Process data → Build model → Compare algorithms

- Missing data imputation
- Low-effort respondents
- Decision Tree Random Forest
- Machine learning classification
Results

Low-Effort Respondents: 38/800

Decision Tree Models: example

Further used: Random Forest (multitude of decision trees)
We implemented different kinds of classification algorithms attempting to find a classifier with better prediction accuracy than Decision Tree or Random Forest for our data. Yet due to the limited information and size of our dataset, with all kinds of classifiers the best accuracies we can get for our models are slightly above 70%. However, our models can still provide insights for the opposition campaign to some extent. We advise our client to collect more data and on more information such as religion in the future if possible.