Learning

Model class

Training data \( \{(x_i, k_i)\}_{i=1}^{l} \)

Learning

Classifier \( \Theta \)

Recognition \( k = f(x, \Theta) \)

Set of \( \Theta \)

Model

Observation \( x \)

Parametric flow

Algorithm

\[
E(\lambda, s) = \sum_{r \in R} q_r(s_r) + \lambda \sum_{\{r, r'\} \in E} I(s_r \neq s_{r'})
\]

\[
\hat{E}(\lambda) = \min_s E(\lambda, s)
\]

Results

Conclusions & future work

\[E(\lambda) = \sum_{r \in R} q_r(s_r) + \sum_{s \in S} I(s \neq s')\]

Learning of interaction strength \( \lambda \) in binary image segmentation

Identifying a subset of feasible parameters \( \Rightarrow \) handling sets of classifiers

User interaction driven by the algorithm

- Extentions to more than one parameter
- Evaluation of other user request strategies
- How to incorporate approximations in case \( E(\lambda) \) is not exactly solvable?