Socratic dialogue: classifiers

- A classifier maps attributes to classes.
- Naive Bayesian Classifier (NBC): given attributes, calculating expected utility of choosing one class over another.
- NBC needs enough pre-classified attribute samples to work.
- Naive Credal Classifier (NCC): modification of NBC that requires less training samples, but often does not return a unique class.
- NCC designed for discrete attributes (uses IDM).
Socratic dialogue: practicality IDM

1. Easy updating, because conjugate distributions are used.

2. Model parameters have a nice interpretation:
   • One is more or less the number of training samples.
   • The other, a summary of the relevant data in the training sample.

3. The optimization problems to compare classes are easily solvable.
Socratic dialogue: Exponential families

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