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

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 ???