

Summary of Syntagmatic Relation Discovery

- Syntagmatic relation can be discovered by measuring correlations between occurrences of two words.
- Three concepts from Information Theory:
 - Entropy $H(X)$: measures the uncertainty of a random variable X
 - Conditional entropy $H(X|Y)$: entropy of X given we know Y
 - Mutual information $I(X;Y)$: entropy reduction of X (or Y) due to knowing Y (or X)
- Mutual information provides a principled way for discovering syntagmatic relations.