More on Noisy Channel (From Lecture 5 Slides)

Independent Word Spelling Correction

- The goal: Find the intended word, given a word where the letters have been scrambled in some manner (quoted from Wikipedia)
- Noisy model = Bayes' Rule
  - $\hat{w} = arg\,max_{w \in V} P(w \mid x) = arg\,max_{w \in V} \frac{P(x|w)P(w)}{P(x)} = arg\,max_{w \in V} P(x \mid w)P(w)$