

Neural Networks and Statistical Machine Translation

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1 Overview of Machine Translation

Speech Translation

Given a source (foreign) sentence f , we want to find the target (english) sentence e

$$\arg \max_e p(e|f) = \arg \max_e p(f|e) \times p(e)$$

Using the Bayes rule

Also,

$$p(f|e) = \sum_a p(a, f|e)$$