

Sequential information source  $P$  is a probability distribution over space of infinite sequences  $P : \{0, 1\}^\infty \rightarrow [0, 1]$ .

It is characterized by a sequence of probability mass functions  $(f^{(1)}, f^{(2)}, \dots)$  where  $f^{(n)}$  is a probability mass function on  $\{0, 1\}^n$  that denotes the marginal distribution of  $P$  on the first  $n$ -bit segments ( $f^{(n)} : \{0, 1\}^n \rightarrow [0, 1]$ ). So for instance

$$f^{(3)}((1, 0, 1)) = \sum_{\{x \text{ with prefix } 1,0,1\}} P(x)$$