

Chain rule



$$P(X, Y) = P(X|Y)P(Y)$$

$$P(X, Y, Z) = P(X|Y, Z)P(Y|Z)P(Z)$$

$$P(X_1, \dots, X_N) = \prod_{i=1}^N P(X_i | X_1, \dots, X_{i-1})$$

