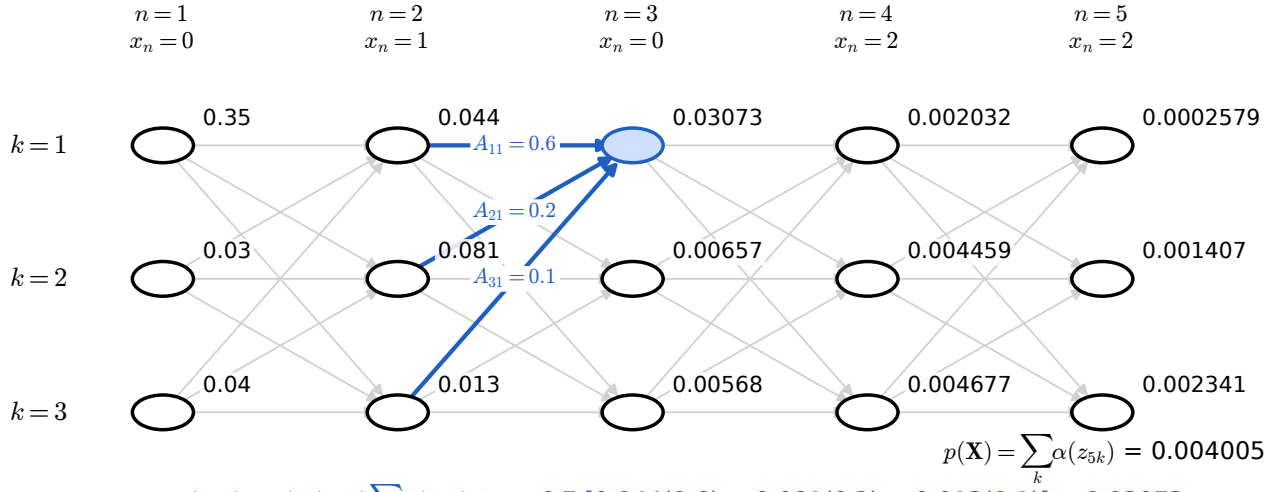
Forward recursion (13.36): the value next to each node is $\alpha(z_{nk}) = p(x_1, \ldots, x_n, z_{nk} = 1)$



$\alpha(z_{3,1}) = p(x_3|z_{3,1}) \sum_j \alpha(z_{2,j}) A_{j1}$ = 0.7 [0.044(0.6) + 0.081(0.2) + 0.013(0.1)] = 0.03073