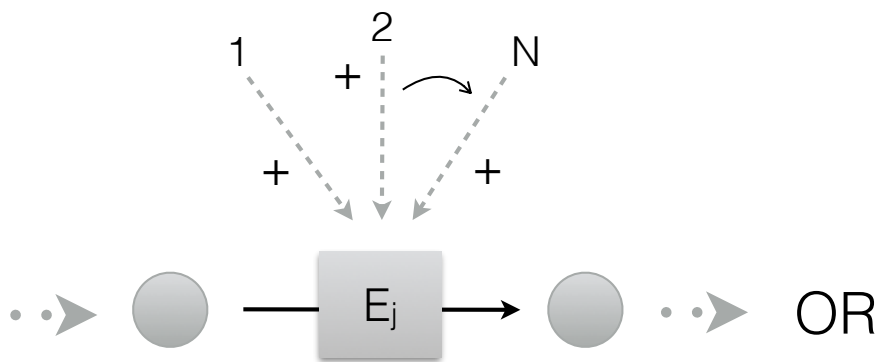
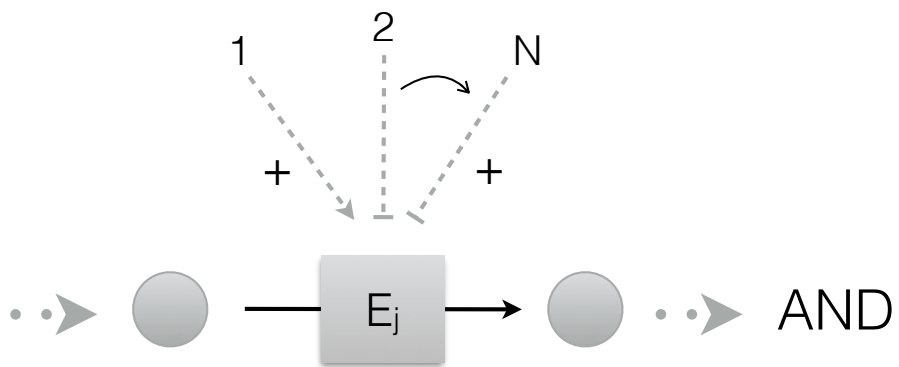


$$0 \leq f_j(\mathbf{x}, \mathbf{k}) \leq 1$$

$$1 - \max\left\{f_1(\mathbf{x}, \mathbf{k}), f_2(\mathbf{x}, \mathbf{k}), \dots, f_N(\mathbf{x}, \mathbf{k})\right\}$$



$$\max\left\{f_1(\mathbf{x}, \mathbf{k}), f_2(\mathbf{x}, \mathbf{k}), \dots, f_N(\mathbf{x}, \mathbf{k})\right\}$$



$$\min\{u, d\}$$

$$u = \max_{f^+}\left\{f_1(\mathbf{x}, \mathbf{k}), f_2(\mathbf{x}, \mathbf{k}), \dots, f_{\mathcal{U}}(\mathbf{x}, \mathbf{k})\right\}$$

$$d = 1 - \max_{f^-}\left\{f_1(\mathbf{x}, \mathbf{k}), f_2(\mathbf{x}, \mathbf{k}), \dots, f_{\mathcal{D}}(\mathbf{x}, \mathbf{k})\right\}$$