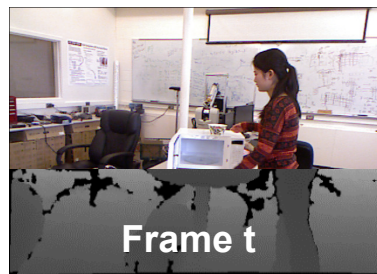
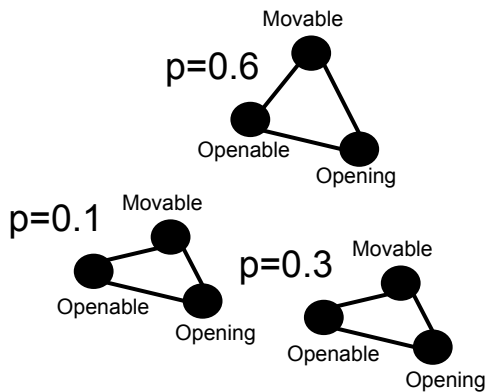
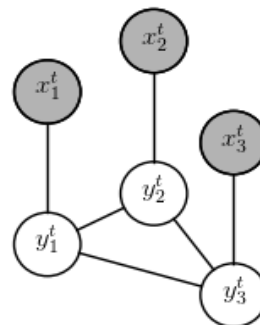


**Belief  $p(y^{t-1} | x^1, \dots, x^T)$**



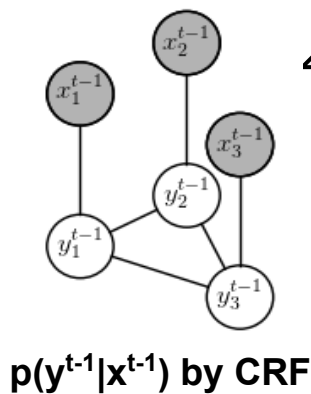
**Forward Messages  $\alpha^t(y^t)$**

**$p(y^t | x^t)$  by CRF**



**rCRF**

**rCRF**



**Backward Messages  $\beta^{t-1}(y^{t-1})$**

**$p(y^{t-1} | x^{t-1})$  by CRF**

**Belief  $p(y^t | x^1, \dots, x^T)$**

