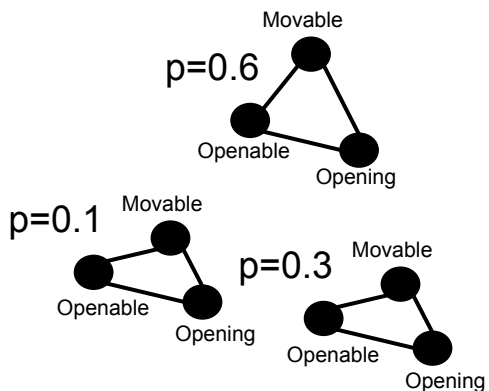
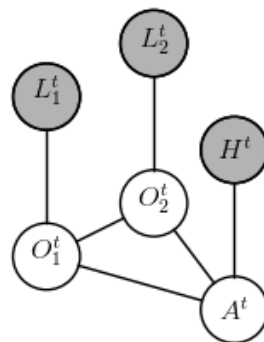


**Belief  $p(y^{t-1} | x^1, \dots, x^T)$**

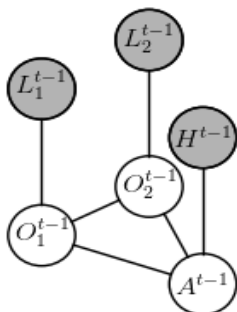


**Forward Messages  $\alpha^t(y^t)$**

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

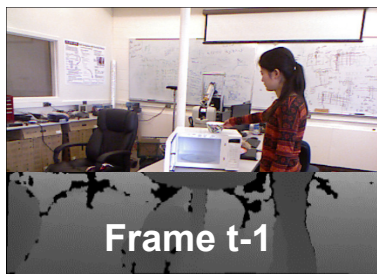


**rCRF**



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

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



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

