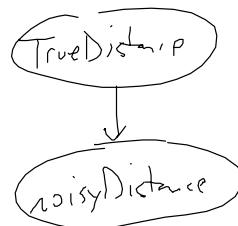


Wednesday, October 26, 2016 10:33 AM

Invisible Ghost

Sensor - Noise Sensor how far, but it gives error

True Distance - how far the ghost actually is
- hidden variable



$$\rightarrow P(\text{TrueDistance} | \text{noisyDistance}) = \alpha P(\text{noisyDistance} | \text{TrueDistance}) P(\text{TrueDistance})$$

belief state initially uniform distribution
 $P(\text{TrueDistance})$ are equally likely for all values of TrueDistance

$$\text{Emission Model} = P(\text{noisyDist} | \text{trueDist})$$

update your beliefs

TrueDistance is not what you want \rightarrow grid

