

Kalman Filter

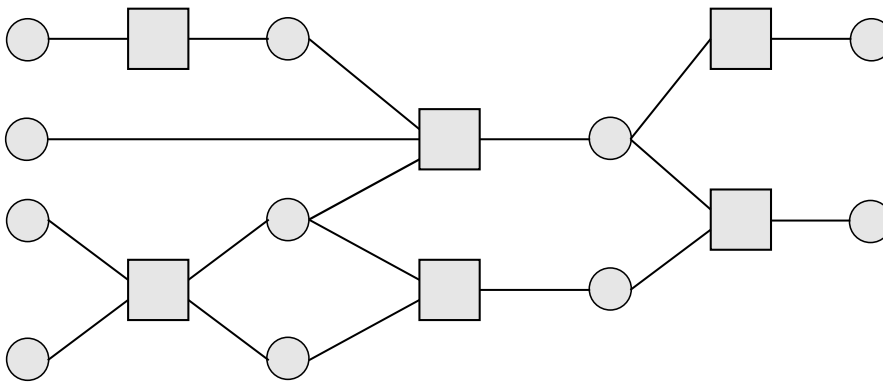
$$\begin{aligned}\mu' &= \mu + \Sigma H^T + (R + H \Sigma H^T)^{-1} (H \mu - data) \\ \Sigma' &= \left(\mathbb{I} - \Sigma H^T (R + H \Sigma H^T)^{-1} H \right) \Sigma\end{aligned}$$

Σ – symmetric, semi-positive-definite

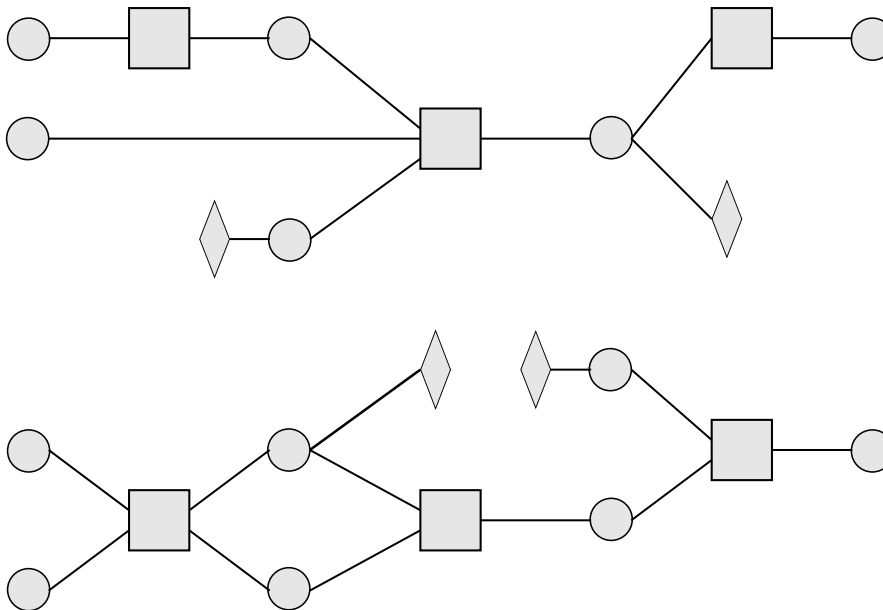
R – symmetric, positive-definite

H – full rank

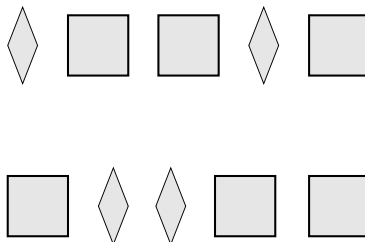
BLAS/LAPACK compilation



Static Scheduling



DAG Ordering



Legend

○ - variable

□ - computation

◇ - communicaiton