

Here are the questions from [6.4 Gaussian filters and moment matching - Quiz]

1. *Which of the following statements regarding moment matching is FALSE?*

Optional Answers:

1. In general, to represent the exact distribution using moment matching we need to match an infinite number of moments.
2. In general, it is enough to use moment matching to find the mean and covariance to exactly represent the true distribution.
3. Moment matching is a method to approximate distributions as a simpler distribution with the same lower-order moments (usually mean and cov).

2. *Take a moment and compare the expressions for the mean and covariance of the posterior density that is presented here to that of the Kalman Filter presented in lecture 4. How are they similar and how do they differ?*

Optional Answers:

Thank You