

CS 438: Artificial Intelligence

Assignment 4 – Spring 2025

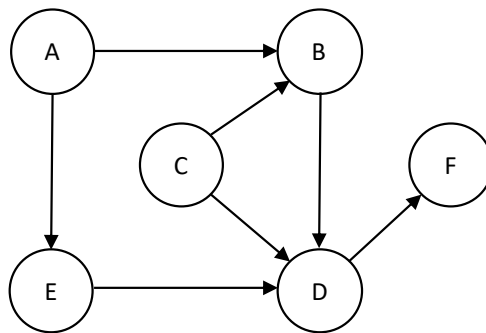
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Bayesian Network and Distributions

Problem 1 [5pts]

For the Bayesian Network below, write the joint probability expressed as a product of the individual conditional probabilities.



Problem 2 [5pts]

Draw the Bayes Network associated with the following joint distribution:

$$P(A)P(B|A)P(C)P(D|A,B,C)P(F)P(E|D,F)$$