

Pa4.

Car.

1a. P(a. 1/Dz=0) = \(P(Cz=1 | a) P(Dz=0 | Cz=1).

= P(C,=0) P(Cz=1 | C,=0) P(Dz=0 | Cz=1) + P(C,=1) P(Cz=1) C,=1)

P(Dz=0 | Cz=1)

 $= 0.5 \cdot \xi \cdot \int +0.5 \times (1-\xi) \times$

P Normalize, then we got

P(C2-11D2=0) - 7.

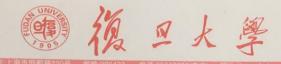
16. P(C2=1 | D2=0, D3=1) = Z P(C1)P(C2=1 | C1)P(D2=1 | C2=1)* = P(C3 | C2=1) P(D3=1 | C3).

= [0.25]+0.5(1-5)][5]+(1-5)[1-]].

=05g(8g+(1-8)(1-8)) The same, to we have:

P(C2=0| D2=0, D3=1) = 0.5(1-3)[(1-2)]+ 2(1-7)]

 $P(C_2=1 \mid D_2=0 \mid D_3=1) = \frac{Q}{Q \mid Q} = \frac{\{j^2 + (i-\xi)(i-j)\}}{\{j^2 + 2(i-\xi)(i-j)\} + \{i-j\}^2}$ normalize:



Ic.

7 PCC2=1 | D2=0) = y (from 1a). = 0.2. P(G2=1 | D2=0,D3=1) = 0.4157.

From D₃=1 We can infer that C₃ is probably equals 1. and C₂ is probably the same as C₃, so it increase the belief of $C_2=1$.

 $\frac{2\eta^{2}+(1-\xi)(-\eta)\theta}{\xi\eta^{2}+2(1-\xi)(-\eta)\eta+\xi(-\eta)^{2}},$ $\xi\eta^{2}+2(1-\xi)(-\eta)\eta+\xi(-\eta)^{2}=\xi\eta+(1-\xi)(-\eta).$ Set j=0.2.

This shows $D_3=1$ doesn't gives us any more here information. So we can know that it should be # C3 have no link by to C2. and & should be O.J.