

Exercise Evidence Theory

We are selecting a new employee from a set of 3 candidates names A, B and C. After analysing some features of their curriculum we have the following mass function:

$$m(a) = 0.3, m(B) = 0.1, m(C) = 0.1, m(AB) = 0, m(AC) = 0.4, m(BC) = 0, m(ABC) = 0.1$$

- a) Calculate the belief and plausibility for all the elements of the frame of discernment.
- b) We have to discard one of the candidates before continuing with the personal interviews. Observing the certainty intervals, explain which candidate should be eliminated.
- c) Invent a new mass function that generates some conflict with the previous one. Show the combination matrix indicating where is the conflict.