

My Solutions for Exercises of Deep Learning Fundamentals by
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1 The Deep Learning Revolution

1.1 No Exercises

2 Probabilities

2.1 Exercise 2.1

Bayes rule

$$P[C = 1|T = 1] = \frac{P[T = 1|C = 1] * P[C = 1]}{P[T = 1|C = 1] * P[C = 1] + P[T = 1|C = 0] * P[C = 0]} \quad (1)$$

$$P[C = 1|T = 1] = \frac{0.90 * 0.001}{0.90 * 0.001 + 0.03 * 0.999} = 0.0292 \quad (2)$$

Given that the test result was positive, there is a 2.92% chance that you have cancer