

CECS 451 - Assignment 6

Tommy Long

October 10, 2022

Write answers to the following questions. (pdf file submission)

1. (2 points) $\mathbf{P}(\text{Visit to asia} \mid \text{dyspnoea})$
(a) $\langle 0.01, 0.99 \rangle$
2. (2 points) $\mathbf{P}(\text{Tuberculosis} \mid \text{positive X-ray}, \neg \text{dyspnoea})$
(a) $\langle 0.041, 0.959 \rangle$
3. (2 points) $\mathbf{P}(\text{bronchitis} \mid \neg \text{lung cancer})$
(a) 0.4429
4. (2 points) $\mathbf{P}(\neg \text{lung cancer} \mid \text{tuberculosis}, \neg \text{dyspnoea})$
(a) 0.95031
5. (2 points) $\mathbf{P}(\text{Smoking} \mid \neg \text{positive X-ray}, \text{bronchitis}, \neg \text{visit to asia})$
(a) $\langle 0.6456, 0.3544 \rangle$