

Cat

documents

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just plain boring

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entirely predictable and low energy

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no surprises and very few laughs

+

very powerful

the most few failures

+

number

Test ?

predictable with no fun

$$P(W/C) = \frac{\text{count}(W, C) + 1}{\text{count}(C) + |V|}$$

$$P(-) = 3/5 \quad P(+) = 2/5 \quad \text{here } |V| = 20$$

$$P(\text{predictable} | -) = \frac{\text{count}(\text{predictable} | -) + 1}{\text{count}(-) + |V|} = \frac{1+1}{13+20} = \frac{2}{33}$$

$$P(\text{predictable} | +) = \frac{0+1}{8+20} = \frac{1}{28}$$

$$P(\text{with } -) = \frac{0+1}{13+20} = \frac{1}{33}$$

$$P(\text{with } +) = \frac{0+1}{8+20} = \frac{1}{28}$$

$$P(\text{no} / -) = \frac{1+1}{13+20} = \frac{2}{33}$$

$$P(\text{no} / +) = \frac{0+1}{8+20} = \frac{1}{28}$$

$$P(\text{fur} / -) = \frac{0+1}{13+20} = \frac{1}{33}$$

$$P(\text{fur} / +) = \frac{1+1}{8+20} = \frac{2}{28} = \frac{1}{14}$$

$$P(- / \text{Test}) = \frac{3}{5} \times \frac{2}{33} \times \frac{1}{33} \times \frac{2}{33} \times \frac{1}{33} = \frac{12}{5929605}$$

$$P(+ / \text{Test}) = \frac{2}{5} \times \frac{1}{28} \times \frac{1}{28} \times \frac{1}{28} \times \frac{1}{14} = \frac{2}{1536640}$$

$$\therefore P(- / \text{Test}) > P(+ / \text{Test})$$

we conclude that the test set is of Negative Category