

Model 1

Model 2

Model 3

ชั้นโนนดีสุดด้าน P, R

Act Pred

Y 0.3

Y 0.9

N 0.2

N 0.6

Y 0.8

N 0.1

Model 1 ดีสุด #

EX

Model A Precision 80, Recall = 30 F1 = 0.44

Model B P = 50, R = 60 F1 = 0.55

F1-score : ค่าเฉลี่ยถ่วงน้ำหนักของ Precision และ Recall เมื่อตัดสินใจไม่ได้

$$0.923 < \frac{12}{13}$$

$$0.75 < \frac{6}{8}$$

$$0.667 < \frac{2}{3}$$

ทุก Model 1 Precision = $\frac{3}{2}$, Recall = $\frac{2}{3}$ Model 2 P = $\frac{3}{5}$, Recall = 1Model 3 P = $\frac{2}{3}$, R = $\frac{2}{3}$

$$F1 = \frac{2 \left(\frac{3}{2} \right) \left(\frac{2}{3} \right)}{1 + \frac{2 \cdot \frac{6}{13}}{13}}$$

$$F1 = \frac{2 \left(\frac{3}{5} \right) (1)}{\frac{2}{5} + 1}$$

F1 :

$$\frac{2 \left(\frac{2}{3} \right) \left(\frac{2}{3} \right)}{\frac{2}{3} + \frac{2}{3}} = \frac{\frac{8}{9}}{\frac{4}{3}} = \frac{8}{9} \times \frac{3}{4} = \frac{2}{3}$$

$$\frac{2 \cdot \frac{8}{9}}{\frac{2}{3} + \frac{2}{3}} = \frac{\frac{16}{9}}{\frac{4}{3}} = \frac{16}{9} \times \frac{3}{4} = \frac{4}{3}$$