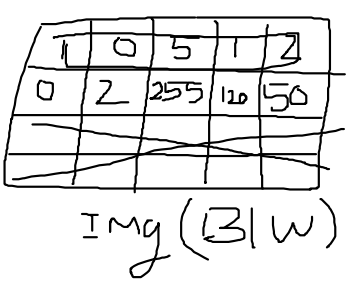
Sum of squared differences

November 28, 2020 3:50 PM



Img (B|W)

each px is 0 – 255

[1,0,5,1,2,0,2,255,120,50]

1 Row 2 Row

$I_1 = [50, 2, 5, 1]$ $I_2 = [40, 6, 2, 2]$

SD → 50 − 40 = 10
2 − 6 = −4
5 − 2 = 3
1 − 2 = −1

10 + (−4) + 3 + (−1) = 8 ← SD

$I_1 = [50, 2, 5, 1]$ $I_2 = [40, 6, 5, 2]$

SD → 50 − 40 = 10
2 − 6 = −4
5 − 5 = 0
1 − 2 = −1

→ (−4) + (−1) + 10 = 5 ← SD

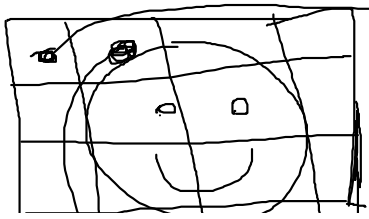
SSD = Sum squared differences

$I_1 = [50, 2, 5, 1]$ $I_2 = [40, 6, 5, 2]$

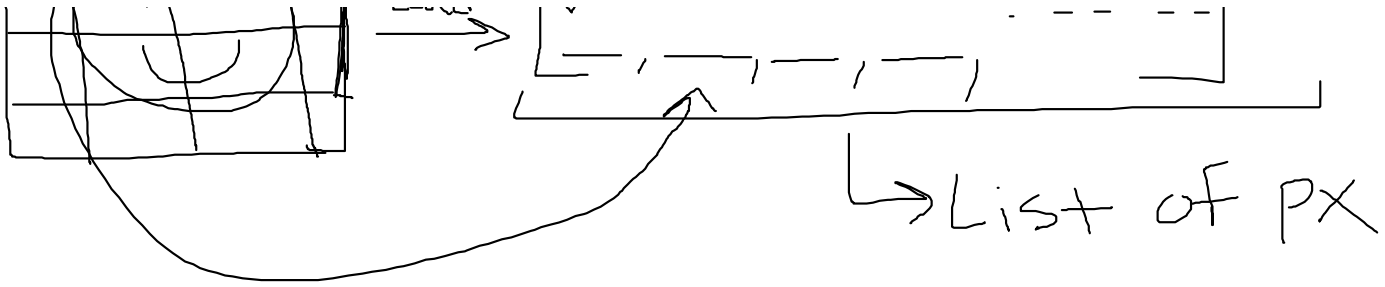
SSD → $(50-40)^2 = 10^2 = 100$
$(2-6)^2 = (-4)^2 = 16$
$(5-5)^2 = 0^2 = 0$
$(1-2)^2 = (-1)^2 = 1$

100 + 16 + 0 + 1
= 117

$\sqrt{117}$ = 10.8



Load → [, , , , . . .]



britness (px) → 0 – 255