Computing A Haar Feature

$\otimes$ H_A

White = 1, Black = -1
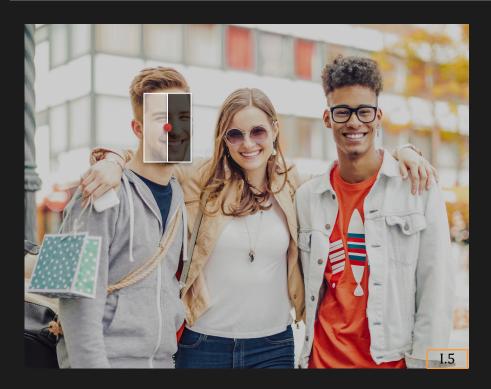
Response to Filter H_A at location (i, j):

$$V_A[i,j] = \sum_m \sum_n I[m,n]H_A[m-i, n-j]$$

$$V_A[i,j] = \sum (\text{pixel intensities in white area})$$

$$- \sum (\text{pixels intensities in black area})$$