

2D Convolution Calculation Tutorial Exercise

Calculate the convolution between $x(n_1, n_2)$ and $h(n_1, n_2)$:

$$x(n_1, n_2) = \begin{cases} 1, & \text{when } 0 \leq n_1 < N_1 \text{ and } 0 \leq n_2 < N_2 \\ 0, & \text{otherwise} \end{cases}$$

$$h(n_1, n_2) = \begin{cases} 1, & \text{when } n_1 \leq 0 \text{ and } n_2 \leq 0 \\ 0, & \text{otherwise} \end{cases}$$