

# Convolution vs. Correlation

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Convolution:

$$g[i, j] = \sum_m \sum_n f[m, n] \underline{t[i - m, j - n]} = t * f$$

Correlation:

$$R_{tf}[i, j] = \sum_m \sum_n f[m, n] \underline{t[m - i, n - j]} = t \otimes f$$

No Flipping in Correlation

Convolution = Correlation when Template is Symmetric