$x_i \to x_j$ transfer formula:

$$I_x(n_i, n_j) = I_x(n_i+1, n_j-1) + (x_i - x_j) I_x(n_i, n_j-1)$$

$$I_x(n_i, n_j-1) = I_x(n_i+1, n_j-2) + (x_i - x_j) I_x(n_i, n_j-2)$$

$$\vdots$$

$$I_x(n_i, 1) = I_x(n_i+1, 0) + (x_i - x_j) I_x(n_i, 0)$$

$$\therefore I_x(n_i, n_j) = I_x(n_i+2, n_j-2) + 2(x_i - x_j) I_x(n_i+1, n_j-2) + (x_i - x_j)^2 I_x(n_i, n_j-2)$$

$$= I_x(n_i+3, n_j-3) + 3(x_i - x_j) I_x(n_i+2, n_j-3) + 3(x_i - x_j)^2 I_x(n_i+1, n_j-3) + (x_i - x_j)^3 I_x(n_i, n_j-3)$$

$$= I_x(n_i+4, n_j-4) + 4(x_i - x_j) I_x(n_i+3, n_i-4) + 6(x_i - x_j)^2 I_x(n_i+2, n_j-4) + 4(x_i - x_j)^3 I_x(n_i+1, n_j-4) + (x_i - x_j)^4 I_x(n_i, n_j-4)$$

binomial coffecient.

$$\vdots$$

j分量
不是k分量

$$I_x(n_i, n_j) = \sum_{k=0}^{n_j} C_{n_j}^{k} (x_i - x_j)^k I_x(n_i + n_j - k, 0)$$