## LaTex 笔记

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## 1 表达式与方程组

离散求和

$$H(x) = \sum_{i=0,j=0}^{N-1,M-1} (x_{i,j} = x), x = 0, 1, \dots, 255$$
 (1)

离散求和 (方程组)

$$u = \sum_{i=0}^{k} \sum_{j=0}^{i} a_{ij} \cdot x^{i} y^{i-j}$$
 (2)

$$v = \sum_{i=0}^{k} \sum_{j=0}^{i} b_{ij} \cdot x^{i} y^{i-j}$$
(3)

均方根误差 RMSE

$$RMSE_x = \sqrt{\frac{\sum_{i=0}^{N-1} (x_i' - u_i)^2}{N}}$$
 (4)

$$RMSE_{y} = \sqrt{\frac{\sum_{i=0}^{N-1} (y_{i}' - v_{i})^{2}}{N}}$$
 (5)

## 2 向量与矩阵

矩阵运算

$$\begin{bmatrix} u \\ v \end{bmatrix} = \begin{bmatrix} a_0 & a_1 & a_2 \\ b_0 & b_1 & b_2 \end{bmatrix} \cdot \begin{bmatrix} 1 & x & y \end{bmatrix}^T \tag{6}$$