

Algoritmo Multiplicar Matrices

Thursday, January 31, 2013

2:09 PM

$$\begin{pmatrix} a_{00} & a_{01} & a_{02} \\ a_{10} & a_{11} & a_{12} \\ a_{20} & a_{21} & a_{22} \end{pmatrix} \begin{pmatrix} b_{00} \\ b_{10} \\ b_{20} \end{pmatrix} = \begin{pmatrix} c_{00} \\ c_{10} \\ c_{20} \end{pmatrix}$$

$$\begin{aligned} c_{00} &= a_{00}b_{00} + a_{01}b_{10} + a_{02}b_{20} \\ c_{10} &= a_{10}b_{00} + a_{11}b_{10} + a_{12}b_{20} \\ c_{20} &= a_{20}b_{00} + a_{21}b_{10} + a_{22}b_{20} \end{aligned}$$

$$C_{ij} = \sum_{z=0}^2 a[i][z] b[z][j]$$

$$\begin{matrix} \begin{matrix} \text{A} \\ m \times n \end{matrix} & \begin{matrix} \text{B} \\ n \times p \end{matrix} & = & \begin{matrix} \\ m \times p \end{matrix} \end{matrix}$$