

for $k=1$ to r
 for $i=1$ to m

for $j=1$ to n

$$C(i, j) = C(i, j) + A(i, k) * B(k, j)$$

for $k=1$ to r

for $i=1$ to m

$$C(i, *) = C(i, *) + A(i, k) * B(k, *)$$

A Row of C is computed using a row of B and an element A . (partial)

$$\text{row} \times \text{matrix} = \text{matrix}$$

for $k=1$ to r

$$C(*, *) = C(*, *) + A(*, k) * B(k, *)$$

Entire matrix is computed using a column of A and a row of B (partial)

$$\text{matrix} \times \text{row} = \text{matrix}$$

row outer product

for $k=1$ to r

for $j=1$ to n

for $i=1$ to m

$$C(i, j) = C(i, j) + A(i, k) * B(k, j)$$

for $k=1$ to r

for $j=1$ to n

$$C(*, j) = C(*, j) + A(*, k) * B(k, j)$$

A Column of C is computed using a column of A and an element of B (partial)

$$\text{matrix} \times \text{element} = \text{matrix}$$

for $k=1$ to r

$$C(*, *) = C(*, *) + A(*, k) * B(k, *)$$

$$\text{matrix} \times \text{matrix} = \text{matrix}$$

column outer product.