

ComS 311
Recitation 3, 2:00 Monday
Project 2

Sean Gordon

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Width Cut

Recurrence:

widthCut = cost **if** x == height
widthCut = min(widthCut(M, height, width, x+1, y - 1, cost+currentCost),
widthCut(M, height, width, x+1, y , cost+currentCost),
widthCut(M, height, width, x+1, y+1, cost+currentCost))

Runtime of algorithm:

Loop through rows: $O(n)$
Nested loop through columns: $O(m)$
Runtime = $O(n*m)$

Stitch Cut

Recurrence:

widthCut = cost **if** x == height
widthCut = min(widthCut(M, height, width, x , y+1, cost+currentCost),
widthCut(M, height, width, x+1, y , cost+currentCost),
widthCut(M, height, width, x+1, y+1, cost+currentCost))

Runtime of algorithm:

Loop through rows: $O(n)$
Nested loop through columns: $O(m)$
Runtime = $O(n*m)$