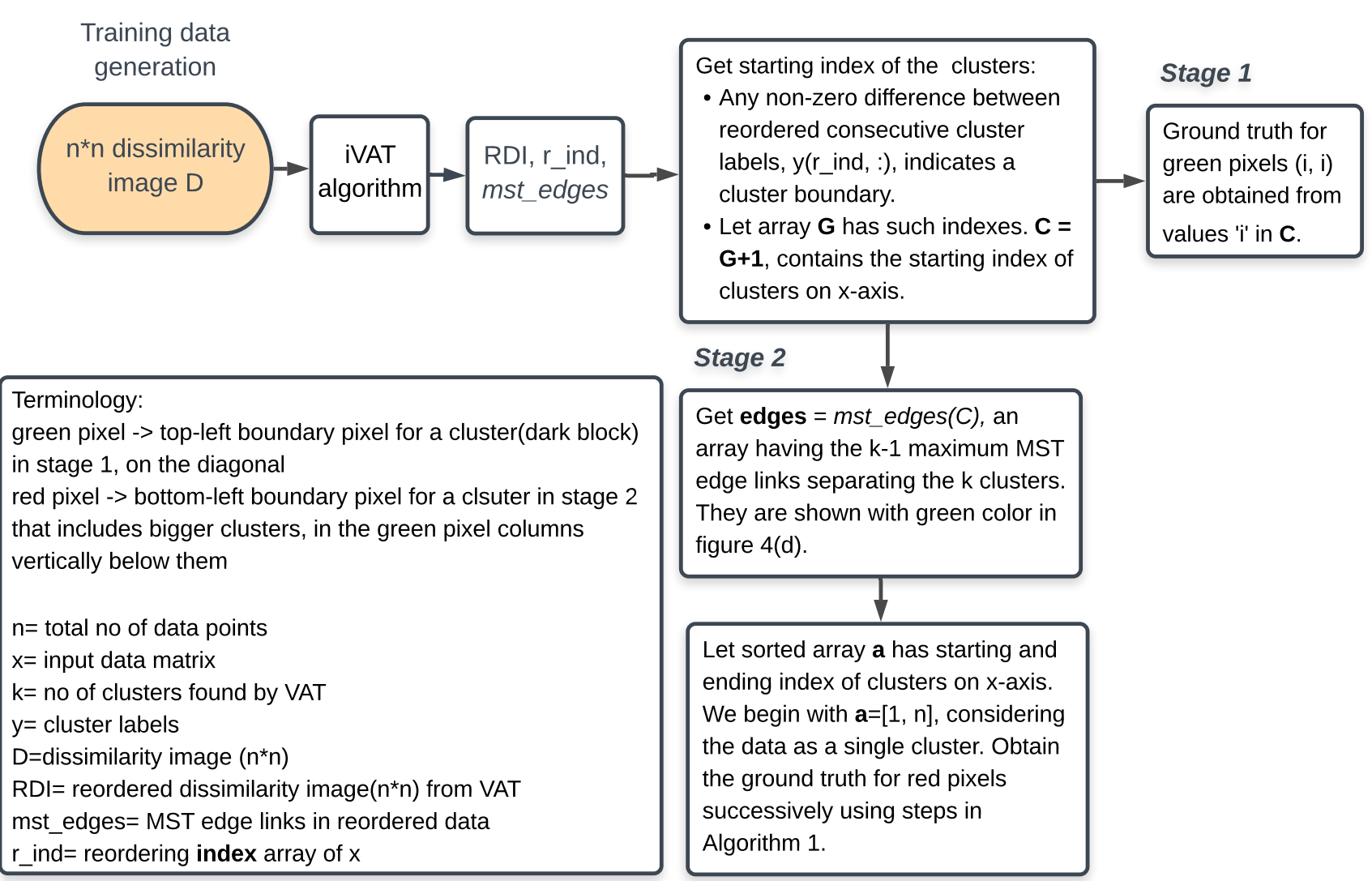
Training data generation
n*n dissimilarity image D
iVAT algorithm
RDI, r_ind, mst_edges
Get starting index of the clusters:
• Any non-zero difference between reordered consecutive cluster labels, y(r_ind, :), indicates a cluster boundary.
• Let array G has such indexes. C = G+1, contains the starting index of clusters on x-axis.
Stage 1
Ground truth for green pixels (i, i) are obtained from values 'i' in C.
Stage 2
Get edges = mst_edges(C), an array having the k-1 maximum MST edge links separating the k clusters. They are shown with green color in figure 4(d).
Let sorted array a has starting and ending index of clusters on x-axis. We begin with a=[1, n], considering the data as a single cluster. Obtain the ground truth for red pixels successively using steps in Algorithm 1.
Terminology:
green pixel -> top-left boundary pixel for a cluster(dark block) in stage 1, on the diagonal
red pixel -> bottom-left boundary pixel for a clsuter in stage 2 that includes bigger clusters, in the green pixel columns vertically below them
n= total no of data points
x= input data matrix
k= no of clusters found by VAT
y= cluster labels
D=dissimilarity image (n*n)
RDI= reordered dissimilarity image(n*n) from VAT
mst_edges= MST edge links in reordered data
r_ind= reordering index array of x