```
# get all TFBS clusters within each TF family
for each tf_family
  for each tf in tf_family
  search_nearby_for_cluster(tf, new_cluster)
  add new_cluster to cluster_list

# recursively add nearby TFs to form a cluster
function search_nearby_for_cluster(tf, cluster)
{
  # stop if this tf is too far from the cluster being formed
  return if (distance(tf, clustered) > Tmax)

  # go through all nearby neighbours that haven't already been
included
  neighbours = get_neighbours(tf, cluster)
  for each neighbour (neighbours) {
  if (distance(neighbour, cluster) < Tmax)
  add neighbour to cluster

  # check the chain of neighbours and add if they are close
  all_neighbours = search_nearby_for_cluster(neighbour, cluster)
  for each neighbour2 in all_neighbours
  if (distance(neighbour2, cluster) < Tmax)
  add neighbour2 to cluster
}
```

Figure S4 TFBS clustering algorithm pseudocode.