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

# recursively add nearby TFs to form a cluster
function search_nearly_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_nearly_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.