

```
1 function [cluster]= NM_pred_spot_cluster(input, delta, dimensions, data_matrix)
2 %this function takes an input vector, and returns a cluster or predictions within delta of
  the input
3 %dimensions contains integers that are the indices of the dimensions of data actually
  contained in the input vector (i.e., the non-missing entries)
4
5 input_matrix = data_matrix;
6
7 input_matrix(:,dimensions) = 1;
8 input_matrix(:,dimensions) = input_matrix(:,dimensions).*input(dimensions);
9
10 diff_col = sum((input_matrix .- data_matrix).^2,2);
11 [temp_col indeces] = sort(diff_col);
12
13 temp_col = temp_col <= delta^2;
14 x = find(temp_col == 1);
15
16 rows = indeces(x);
17 cluster = data_matrix(rows,:);
18
19 endfunction
```