

Data: unlabeled data set $\mathbf{X} = \{\mathbf{x}_1, \dots, \mathbf{x}_N\}$,
dissimilarity measure d , perplexity h , and
threshold θ .

Result: class-labels $Y \in \{\text{inlier}, \text{outlier}\}$.

begin

for $\mathbf{x}_i \in \mathbf{X}$ **do**

 Determine sigma

 Compute binding probability b_{ij} using
 Equation 4.1 and Equation 4.5 with
 dissimilarity measure d and perplexity h .

end

for $\mathbf{x}_j \in \mathbf{X}$ **do**

 Compute outlier probability $p(\mathcal{C}_o|\mathbf{x}_j)$
 using Equation 4.2, and determine
 class-label:

if $p(\mathbf{x}_i \in \mathcal{C}_o) > \theta$ **then**

$y_i = \text{outlier}$

else

$y_i = \text{inlier}$

end

end

return Y

end