**Machine Learning Assignment One**

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One、The Comprehension Of Algorithms

1. EM Algorithm

(1)、Description

The full name of the EM algorithm is called Expectation Maximization, which is the expectation maximization algorithm. It is a frequently used algorithm in the model with hidden variables, which is aimed at the unsupervised learning problem of hidden variables. It is involved in the following two algorithms called GMM and K-means mentioned below. Briefly speaking, GMM and K-means are two-case implementations of the EM.