

EM (Expectation-Maximization) algorithm is an iterative method for finding maximum likelihood estimates in cases, when either complete data include missing values or assuming the existence of additional unobserved data points can lead to more simple formulation of the model. Each of its iterations consists of two parts. During the E step (expectation) we calculate the expected value of the log-likelihood function of the complete data, with respect to the observed data and the current estimate of the parameter. The M step (maximization) then finds new estimate, which will maximize the function obtained in the previous step and which will be used in the next iteration in step E. EM algorithm has important use in e.g. price and manage risk of the portfolio.