
Algorithm 1 Expectation Maximization

initialize $\vec{\theta}^0$, T , and $i \leftarrow 0$

repeat

$i \leftarrow i + 1$

E Step: compute $Q(\vec{\theta}; \vec{\theta}^i)$

M step: $\theta^{i+1} \rightarrow \arg \max_{\theta} Q(\vec{\theta}; \vec{\theta}^i)$

until $Q(\vec{\theta}^{i+1}; \vec{\theta}^i) - Q(\vec{\theta}^i; \vec{\theta}^{i-1}) \leq T$

return $\hat{\vec{\theta}} \rightarrow \vec{\theta}^{i+1}$
