EMAPSORITHMA Maths. Cluster weights Tik = W(xi | Ma, Zik). Tik

Zi N(xi | Mi, Zi). Ti

j=1 log (rik) = log [TTk (ZT) det (Zik) e (x:-Mh) Zik (x:-Mh) Log [] π; (2π) det (Σ;) e= (x:-M;) Σ; (x:-M;) = log (The) - \(\frac{1}{2} \log(2TT) - \frac{1}{2} \log(2TT) - \frac{1}{2} \log(2T) - \fr - log [] e = (x; -Mj) [Zij (x; -Mj) - 2 log [Zij] - [log (211) + log [Tij]] = log(TTk) - \frac{1}{2} [rlog(2TT) + log |ZTk| + Mk] - log \frac{ZT}{j=1} exp [log(TTj) - \frac{1}{2} [rlog(2TT) + log |ZTj| + M5]] where $M_{k} = (x_{i} - \mu_{k})^{T} \sum_{k}^{-1} (x_{i} - \mu_{k})$ ann Ordate This N Zirik Mn: Zirik Xi SI rik $\sum_{i,k} = \sum_{i} r_{ik} (x_i - \sum_{i,k}) (x_i - \sum_{i,k})^T$

Si rik