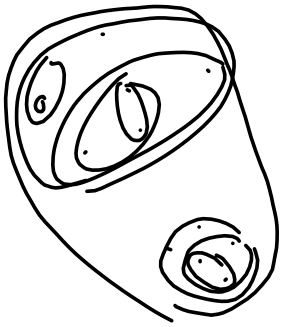
Datamining 1 2019-01-09

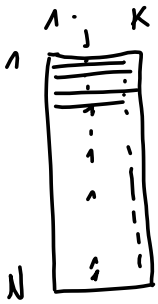


$\vec{m}_i$

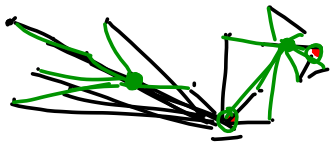
$M \cdot \left(\frac{1}{M}\sum_{i=1}^{M} x_i\right) + x_{M+1} \rightarrow \frac{1}{M+1}\sum_{i=1}^{M+1} x_i$

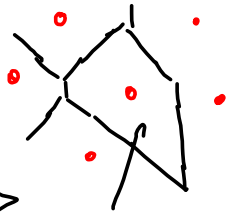
$M+1$

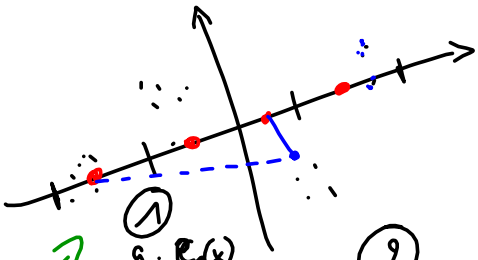
$\vec{m}_{i,\text{new}}$

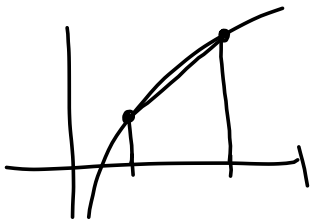


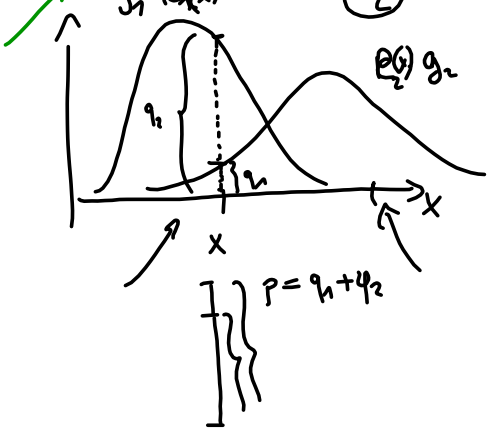
Σ = #Points in cluster j











$\log\left(e^{\frac{(x-\mu)^2}{2\sigma^2}}\right) \rightarrow \frac{(x-\mu)^2}{2\sigma^2}$

$\sum_i \frac{(x_i-\mu_i)^2}{2\sigma_j^2}$