\omega\_{d}= \frac{\sum\_{j=1}^Mp\_jp(X\_d|\xi\_{jd})}{\sum\_{j=1}^Mp\_jp(X\_d|\xi\_{jd})+p(X\_{d}|\lambda\_d)}

https://latex.codecogs.com/gif.latex?%5Comega_%7Bd%7D%3D%20%5Cfrac%7B%5Csum_%7Bj%3D1%7D%5EMp_jp%28X_d%7C%5Cxi_%7Bjd%7D%29%7D%7B%5Csum_%7Bj%3D1%7D%5EMp_jp%28X_d%7C%5Cxi_%7Bjd%7D%29&plus;p%28X_%7Bd%7D%7C%5Clambda_d%29%7D