

EXTRACT-DISCRIMINANT($S, \delta_m, \theta_m, \alpha$)

$w \leftarrow$ create Map

FOR $i \leftarrow 1$ to $|S|$ DO

$f \leftarrow$ EXTRACT-FEATURES(s_i, δ_m, θ_m)

FOR EACH key in f DO

IF w does not contain key THEN $w[key] \leftarrow 0$

$w[key] \leftarrow w[key] + y_i \alpha_i f[key]$

RETURN w