for j = 1 to d do:

theta\_j = a random number between 0 and 1

end

theta\_i = 0

do until theta\_j – theta\_i < threshold:

set i to random value between 0 and d

change = 0

for j = 1 to d

alpha = squareroot of d - j

delta = (exp(-y(i) \* dot-product(theta, x(i)) \* y(i)\*x(i)\_j) /

(1 + exp(-y(i) \* dot-product(theta, x(i)))

end

theta\_i = theta\_j + alpha \* delta

end

return theta