advanced optimization

Use octave’s fminunc function along with optimset function.

options = optimset('GradObj', 'on', 'MaxIter', 100 [customizable] );

initialTheta = zeros(n + 1, 1);

[optTheta, functionVal, exitFlag] = fminunc(@costFunction, initialTheta, options);

optTheta = the optimal parameters

functionVal = the output of the cost function with the optimal parameters

exitFlag = convergence status

Remember to make another file to tell the computer what costFunction do first.

function [jVal, gradient] = costFunction(theta)

jVal = [...code to compute J(theta)...];

gradient = [...code to compute derivative of J(theta)...];

endfunction