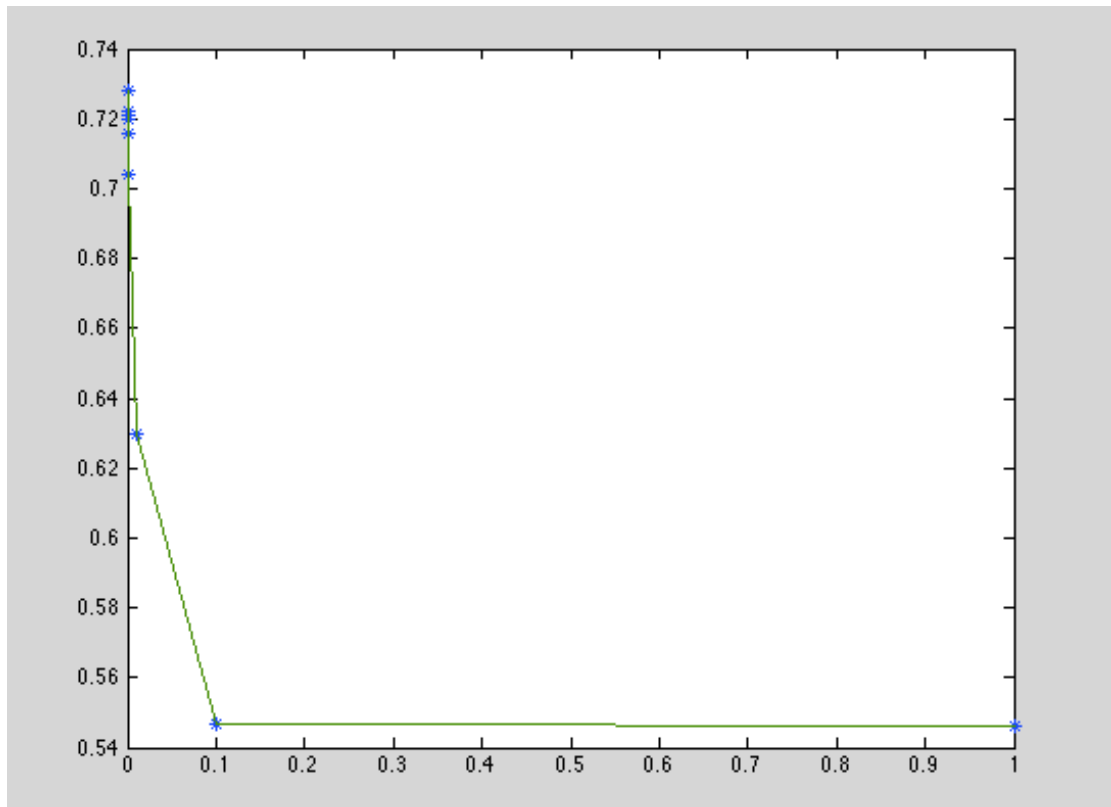


## 10601-HW3 REPORT

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- Did you receive any help whatsoever from anyone in solving this assignment? Yes / No. If you answered 'yes', give full details: No.
- Did you give any help whatsoever to anyone in solving this assignment? Yes / No. If you answered 'yes', give full details: No.



In this figure, X-axis is the value of the parameter lamda, Y-axis is the accuracy of the predicted result.

The green line shows the performance with different lamda values and the blues stars are the data point.

Actually in this test, I set the alpha as 0.024. And the best value for lamda is  $10^{-4}$ . As the number is too small, it may not be obvious in this figure. Here is the test data of the cross-validation.

0	$10^{-7}$	$10^{-6}$	$10^{-5}$	$10^{-4}$	$10^{-3}$	$10^{-2}$	$10^{-1}$	1
0.716	0.720	0.721	0.722	0.728	0.704	0.630	0.547	0.546