

Linear Regression Homework
CS 4499/5599

For this assignment you will practice computing a linear regression.

- Remember: for regression we use an output node which is not thresholded (just does a linear sum) and iteratively apply the delta rule ($\Delta w_i = c(t - net) x_i$) – thus the *net* is the output
- Assume we start with all weights as 0
- Bias input=1
- What are the new weights after one iteration through the following training set using the delta rule with a learning rate $c = .2$

<i>x</i>	<i>y</i>	<i>Target</i>
0.3	0.8	0.7
-0.3	1.6	-0.1
0.9	0	1.3

Inputs (x,y,bias)	Target	Net	Weight Vector (x,y,bias)	ΔW
			0, 0, 0	