**Example 1: Regression Techniques**

1a. Already know that linear regression will typically produce a line to fit the points. What type of curve will a two-variable linear regression model produce?

1b. Why is there no way to use linear regression to perform object classification?

1c. Regularization comes in a few forms. The main two are time and spatial regularization. Would there be a way to regularize both at the same time and achieve efficiency on both space and time in the training process?

1d. Why is logistic regression smoother than linear regression?