

## Some SKLearn Regression Problems

1. Use the `firstday2122.csv` dataset to create a model which predicts height as a function of wingspan and sex. Are there any outliers that you should remove? (See a plot on the last homework.) How much does being male add to the predicted height? Produce a scatter plot of the data and the line.
2. Use the `somedata.csv` dataset to create a model which predicts myy as a function of myx. Produce a plot showing the data and your model on the same set of axes.
3. In the `firstday2122.csv` dataset, perform a regression to predict cubit as a function of wingspan and height. Find the  $R^2$  value. Plot the two feature variables on a scatterplot. Does there seem to be a linear relation between the two. Perform ridge regression with several values of  $\lambda$ . Compare the  $R^2$  and the coefficients and comment on the best models.