

**Project Details:**

- Goal: Predict the proportion of a movie's **total gross** that is from foreign revenue.
- Data: All data scraped from BoxOfficeMojo.com
- Dependent variable = foreign gross percent
- Features (as of today; more to come): Genre, Distributor, Runtime, MPAA Rating, Release Year, Production Budget.

The following two figures represent the OLS output and residual plot. The adjusted  $R^2$  is 0.373. Per the residual plot, most of the data points are close to 0.

**Figure 1.  $R^2$  Output**

<b>Dep. Variable:</b>	y	<b>R-squared:</b>	0.422
<b>Model:</b>	OLS	<b>Adj. R-squared:</b>	0.373
<b>Method:</b>	Least Squares	<b>F-statistic:</b>	8.645
<b>Date:</b>	Tue, 04 Oct 2016	<b>Prob (F-statistic):</b>	2.38E-79
<b>Time:</b>	18:19:26	<b>Log-Likelihood:</b>	-23802
<b>No. Observations:</b>	1182	<b>AIC:</b>	4.78E+04
<b>Df Residuals:</b>	1089	<b>BIC:</b>	4.83E+04
<b>Df Model:</b>	92		
<b>Covariance Type:</b>	nonrobust		

**Figure 2. Residual Plot**

