

Results

From our 10-fold cross validation we observe a mean squared error of: 0.6064

Next we build the score function, utilizing the above $\hat{\beta}_{OLS}$ values as the weights for our function. This yields the following expression:

$$f(X_{.,i}) := (-0.0715) X_{1,i} + 0.6094 X_{2,i} + (-0.1537) X_{3,i} + 0.1469 X_{4,i} + 0.0582 X_{5,i} + 0.2076 X_{6,i}$$

Where $X_{j,i}$ represents the j-th regressor value from our OLS regression of the i-th observation in the data matrix. Using this equation, we apply it to all schools in our data matrix and sort by their relative score to yield the top 20 colleges we recomend the client recruits from:

SCORE	INSTNM	CITY
2.14	Massachusetts Institute of Technology	Cambridge
2.06	University of Chicago	Chicago
2.04	Washington University in St Louis	Saint Louis
2.04	Yale University	New Haven
2.03	Vanderbilt University	Nashville
2.02	Harvard University	Cambridge
2.01	Princeton University	Princeton
1.99	Rice University	Houston
1.98	Columbia University in the City of New York	New York
1.96	Northwestern University	Evanston
1.94	Carnegie Mellon University	Pittsburgh
1.93	Stanford University	Stanford
1.93	Duke University	Durham
1.92	Claremont McKenna College	Claremont
1.91	University of Pennsylvania	Philadelphia
1.85	Johns Hopkins University	Baltimore
1.80	Dartmouth College	Hanover
1.79	Williams College	Williamstown
1.78	Brown University	Providence
1.75	University of Notre Dame	Notre Dame

Table 1: Top 20 Colleges to Recruit From