Model Debugging: Error Analysis

- Filter on failed predictions, and manually look for patterns.
- This helps you pivot on target, key attributes, and failure type, and build histograms of error counts.

For continuous response variables the residuals are calculated.

Residual = difference between the forecast value and the actual value.

Some common problems:
- Data problems (eg. many variants for the same word)
- Labeling errors (e.g. data mislabeled)
- Under/over-represented subclasses (too many examples of one type)
- Discriminating information is not captured in features

Note: it often helps to see what the model is predicting correctly.