

Assignment (Due May 12th Fri 10AM)

Apply regression analysis to a data set of your choice.

1. Collect or identify a data set.

- ▶ UCI Machine Learning Repository
(<http://archive.ics.uci.edu/ml/index.php>).

2. Implement and apply (multivariate) regression.

- ▶ Hold out a small subset of the data to evaluate accuracy of predictions.
- ▶ Try various methods (e.g., basis functions).

3. Write a report that clearly discusses the following (preferably as a Jupyter notebook).

- ▶ Explanation of the data you used. Clearly state the objective (e.g., predict B from A).
- ▶ Explanation of regression analyses you implemented and applied with math.
- ▶ Evaluation results including quantitative analysis with adequate visualization (i.e., graphs).

4. Submit, via PandA, the data, code, and report. If your data is large, please include a link to it in your report instead of uploading it.

★ Using approaches discussed in Week 1~3

or classification

Implement from Scratch!