Weekly Report
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Jingyu Deng

This Week

- Implement Wang's algorithm (not finished)
- Add new interface functions
    - For classification
- Implement Anil's algorithm for classification

New Functions

- insert (n_estimators, x, y, category)
    - user can decide the category of new trained estimators. Now we're supporting random forest regressor and random forest classifier.
- predict_weighted_vote(x, weights)
    - For the case of classification, return the class with maximum weighted vote.
- predict_weighted_classification_result(x, weights)
    - return the classification result for the case of binary classification.
    - Based on Anil's idea.
    - y = sign(tanh(weights' * x))

Anil's algorithm for classification

- Random forest regressor is still used here. (Should we try random forest classifier?)

- New result calculating process. New weight updating method.

- Error rate(and its plot) is printed here instead of mse.

- I keep parameters same to those in the previous master program. So we can still try different learning rate, replace threshold by simply setting.

Next Step

- Create Wang's data and try our algorithm on it. (Anil, could you please create the data? Maybe you can modify your last making data program a little to do this…)

- Implement Wang's algorithm.