Implementation and Analysis of Random Forests

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Abstract

TODO: Decide if we need this section.

1 Introduction

1.1 Decision Trees

TODO: Adjust titles as necessary and add content specifying other papers.

1.2 Ensemble Learning

TODO: Adjust titles as necessary and add content specifying other papers.

1.3 Random Forests

TODO: Adjust titles as necessary and add content specifying other papers.

2 Approach

TODO: Figure out what is supposed to be here.

3 Experiments

TODO: Add content.

3.1 Forest Size

TODO: Add content.

3.2 Tree Depth

TODO: Add content.

Table 1: TODO: Use this table as a template for ours.

Machine Learning Package	DESCRIPTION
Weka	compare speed and accuracy at least
scikit-learn	compare speed and accuracy at least
Tensorflow(?) Probably need one more, but not sure which one yet.	compare speed and accuracy at least

3.3 Splitting Criteria

TODO: Add content.

3.3.1 Entropy

TODO: Add content.

3.3.2 Gini Index

TODO: Add content.

3.4 Custom Improvement?

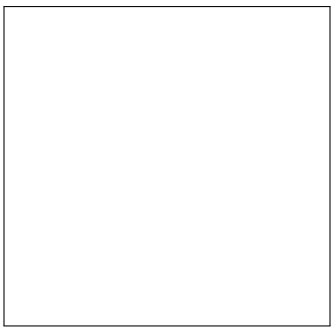

Figure 1: TODO: Use this figure as a template for ours.

Table 1.

4 Conclusion

TODO: Add content.

Contributions

See GitLab project here for specific commits:
https://csil-git1.cs.surrey.sfu.ca/rkm3/mlclass-1777-randomforest

References

[1] Leo Breiman. 2001. Random Forests. Machine Learning. 45 1, 5-32.

TODO: Add more citations and fix formatting of existing one if it's incorrect.