Evaluation of Machine Learning in Empirical Asset Pricing Proposal

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1. Statement of Topic

2. Background Material

> Remember that this is meant to be no more than 5 pages

> includes motivation and brief review of key literature

3. Outline of Aims

4. Research Plan

We first evaluate machine learning algorithms on a collection of simulated datasets which include cross sectionally correlated characteristics which enter the return equation in a range of linear and highly non-linear combinations.

4.1. Models

4.1.1. Linear Model

4.1.2. Penalized Linear

4.1.3. Random Forest

4.1.4. Neural Networks

4.2. Simulation

The machine learning algorithms will be tested on these 12 specifications and their performance evaluated.

4.3. Real World Data

Finally, we evaluate machine learning algorithms on real world data.

5. Outline of Results Thus Far