

Pre-class Learning Activities for Session 8

Instructions:

- Complete the following listed learning activities before class.
- Post your questions in NTULearn Class Site > Discussion Board.
- Good questions will be awarded additional class participation points.
- Post your answers to questions raised in the Discussion Board.
- Good answers will be awarded additional class participation points.

Learning Activities:

1. Gareth James et. al. (2017) An Introduction to Statistical Learning.
 - Section 8.2.1 Bagging & 8.2.2 Random Forest, pp. 316 – 321.
 - Textbook download: <https://www.statlearning.com>
2. [R] <https://www.r-bloggers.com/2018/01/how-to-implement-random-forests-in-r/>
3. [Python] <https://stackabuse.com/random-forest-algorithm-with-python-and-scikit-learn/>

Optional:

- Video on Proximity Matching with Random Forests:
<https://www.youtube.com/watch?v=ULm9BiTJDjI>
[A very innovative use of random forest in a business application context. Proximity matching was originally designed for a more advanced version of automatic missing value handling instead of the function argument na.action = ... Analogous to Surogate concept in single CART tree.]
- Breiman (1996a) Bagging Predictors. Machine Learning, 24, 123-140.
- Breiman (2001) Random Forests. Machine Learning, 45, 5–32.