***Week 17 Reading***

**Lecture**

Part 1: Machine Learning

Part 2: Introduction to the Assignment

**Practical**

Applications of Machine Learning and the Mechanics of ML

**ML resources**

* Chapter 7 in Comber and Brunsdon (2021). *Geographical data science and spatial data analysis: an introduction in R*, Sage, London: <https://leeds.primo.exlibrisgroup.com/permalink/44LEE_INST/13rlbcs/alma991019706049405181> and the code for each chapter is here: <https://study.sagepub.com/comber/student-resources/code-library>
* The caret package: <http://topepo.github.io/caret/index.html>
* *Bradley Boehmke & Brandon Greenwell* (2020). *Hands-On Machine Learning with R*, <https://bradleyboehmke.github.io/HOML/>

**Reading - Read all of these**

* Breiman, L., 2001. Statistical modeling: The two cultures (with comments and a rejoinder by the author). *Statistical science*, *16*(3), pp.199-231 - <https://projecteuclid.org/download/pdf_1/euclid.ss/1009213726>
* Mullainathan, S. and Spiess, J., 2017. Machine learning: an applied econometric approach. *Journal of Economic Perspectives*, 31(2), pp.87-106. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.31.2.87>
* Dzyabura, D. and Yoganarasimhan, H., 2018. Machine learning and marketing. In *Handbook of Marketing Analytics*. Edward Elgar Publishing. <https://faculty.washington.edu/hemay/ml-marketing.pdf>
* Miller, H.J. and Goodchild, M.F., 2015. Data-driven geography. *GeoJournal*, 80(4), pp.449-461.

**Optional references**

* Many references here: <https://bookdown.org/martin_monkman/DataScienceResources_book/ml.html>