Advanced Data Analysis & Data Mining
Statistics 4850G/9850B/9851B
Summary Course Outline

Instructor, teaching assistant, location

Instructor: A. I. McLeod
Teaching Assistant: Ken Jinkun Xiao
Time & Location Lectures: MWF 12:30-1:30 WSC 248

Course website

https://owl.uwo.ca/portal/site/ebd63af3-fddf-4e17-a2d3-7a33416cf2b7   link

Course content

The students are responsible on the midterm tests and final examination for all the course material discussed in the lectures, assignments and course notes. Textbooks and other references are provided to assist the student in gaining a deeper and broader understanding of this course material.

My course notes are provided in Computable Document Format (CDF). You will need to install the Wolfram CDF Player: http://www.wolfram.com/cdf-player/ LINK

Textbooks

There are two textbooks, abbreviated as ISL and ESL. Both are available from Western Libraries as well as being freely available on the author's bookwebsite as downloadable PDFs.

The elements of statistical learning : data mining, inference, and prediction / Trevor Hastie, Robert Tibshirani, Jerome Friedman. 2009. ISL

An Introduction to Statistical Learning: with Applications in R / by Gareth James, Daniela Witten, Trevor

Hastie, Robert Tibshirani. 2013. ESL

The authors of the following book provide an excellent overview. Both authors have extensive industrial experience and O'Neill has taught courses in Data Science at Columbia University.

C. O'Neil and R. Schutt (2013). *Doing Data Science: Straight Talk from the Frontline.* O'Reilly Media. http://shop.oreilly.com/product/0636920028529.do#tab_04_0. LINK

ISL and ESL websites

The ISL book is available as a PDF from book website below:

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http://www-bcf.usc.edu/~gareth/ISL/  LINK
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Statistical Learning MOOC offered by Trevor Hastie and Rob Tibshirani in January 2014 is available from the ISL website.

The ESL book website provides a PDF copy of the book and other resources.

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http://statweb.stanford.edu/~tibs/ElemStatLearn/index.html  LINK
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Datasets from books

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http://cran.r-project.org/web/packages/ISLR/index.html
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http://cran.r-project.org/web/packages/ElemStatLearn/
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