Module 4 Resources

Required Readings





Shmueli, G., Bruce, P. C., Gedeck, P., & Patel, N. R. (2020). Data mining for business analytics: Concepts, techniques and applications in Python. Wiley.

- · Review Chapter 9
- · Review Chapter 10
- Chapter 12
- Chapter 13

Dykes, B. (2019). Effective data storytelling: How to drive change with data, narrative, and visuals. Wiley.

· Chapter 5

 Read the COVID-19 Patient Health Prediction Using Boosted Random Forest Algorithm (https://sandiego.instructure.com/courses/13937/files/1936428?wrap=1) article.

Required Media

- Watch the following lectures by Dr. Shmueli at NTHU:
 - BADM 11 Ensembles (https://www.youtube.com/watch?v=AuehACsdTAQ) (10:33) Closed captioning on site.
 - Discriminant Analysis (Part 1) (https://www.youtube.com/watch?v=BnMaYR4v-Hk) (20:59) Closed captioning on site.
 - Discriminant Analysis: Statistical Distance (Part 2) → (https://www.youtube.com/watch?v=8gKmfQpO8nk) (16:12) Closed captioning on site.

Recommended Media

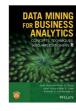
- Watch the LDA (Linear Discriminant Analysis) in Python (https://www.youtube.com/watch?v=9IDXYHhAfGA) video. (22:12) Closed captioning on site.
- Watch the Scikit Learn Ensemble Learning, Bootstrap Aggregating (Bagging), and Boosting 🗗 (https://www.youtube.com/watch?v=X3Wbfb4M33w), video. (07:28) Closed captioning on site.

- Watch the What is the Difference Between Bagging and Boosting Methods in Ensemble Learning? (https://www.youtube.com/watch?v=UeYG64Hm7Es).video. (04:04) Closed captioning on site.
- Watch the A/B Testing Intro: Why, What, Where, and How to A/B Test ⇒ (https://www.youtube.com/watch?v=CH89/d4haRE) video. (13:52) Closed captioning on site.
- Watch the A/B Testing Real-life Example: A Step by Step Walkthrough (https://www.youtube.com/watch?v=VuKIN9S8Ivs) video. (13:38) Closed captioning on site.
- Watch the Stanford Seminar: Peeking at A/B Tests Why It Matters and What to Do About It = .(https://www.youtube.com/watch?v=AJX4W3MwKzU).video. (01:01:33) Transcript available upon request.
- Watch the Why Start Using Uplift Models for More Efficient Marketing Campaigns in Uber (https://www.youtube.com/watch?v=2J9j7peWQgI).video. (31:34) Closed captioning on site.

Supplemental R Programming Resources

The authors and publisher of the Data Mining for Business Analytics textbook offer content using R programming. The list of recommended readings, resources, and media is provided for students who are interested in accumulating knowledge in R.

- Watch the <u>Discriminant Analysis in R</u> ⇒ (https://www.youtube.com/watch?v=r-AQxb1_BKA).video. (09:35) Closed captioning on site.
- Watch the Decision Tree, Random Forest, Bagging, and Boosting in R → (https://www.youtube.com/watch?v=aBYC n7DNgl) video. (15:58) Closed captioning on site.



Shmueli, G., Bruce, P. C., Yahav, I., Patel, N. R., & Lichtendahl Jr., K. C. (2018). Data mining for business analytics: Concepts, techniques, and applications in R. Wiley.

- Review Chapter 9
- · Review Chapter 10
- Chapter 12
- Chapter 13