Introduction to Statistical Learning
with applications in Python

Based on "Introduction to Statistical Learning, with applications in R" by Gareth James, Daniela Witten, Trevor Hastie, Robert Tibishirani

Introduction
Course Overview & Work Environment

course content & goals, datasets, mathematical notation, bayesian basics, technicalities, getting ready

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Abstract

"If you fail to prepare you are preparing to fail."
 – Anonymous

We'll discuss the content and goals of the course and introduce the datasets we'll use, some mathematical notation and the work environment.

We will need to spent some time to make sure everyone is technically ready to go.

We'd like to get an impression of what you expect, what you know and what you want to learn.

Overview

- Literature
- A first look at some data
- Some history
- Back to basics
- Some notation
- The work environment
- Making sure everything works

This will get us ready to go.

Literature: The Backbone of the Course

- The course is mainly based on this book.
- It is freely available as a PDF.
- The book's website is linked from each title page.
- The book uses *R* but we will use *Python*.
- Most of the data sets we'll use are the ones from this book.
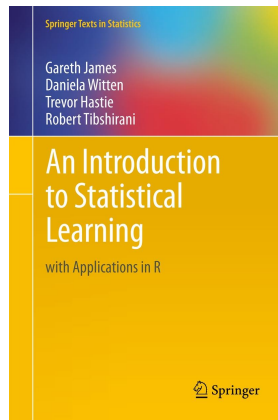
ISLR

We will add to the content and be slightly more mathematical.

Literature: The more in-depth Tome

- This is a well-known reference text by two of the co-authors of ISLR.
- It also is freely available as a PDF.
- This is the book's website.
- The book covers more topics than ISLR and provides a more formal background.
- We'll use some data sets from this book that are not used in ISLR.
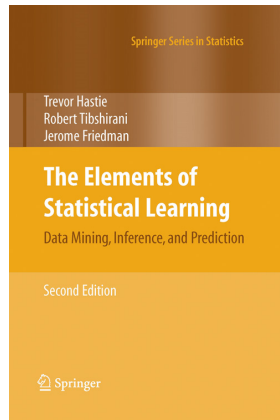
ESL

Consider this a reference for concepts in ISLR.