

LEARNING STATISTICS FROM DATA

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Digging out information from data is essential for learning Statistics. Modern computing and communication technologies can make data collection very efficient. However, our ability to analyze and extract information from large data sets is hard-pressed to keep up with our capacity for data collection. It is known that all statistical methods are developed with some data analysis tasks in mind. However, when we teach these fabulous statistical methods, we usually apply a "topic-oriented" teaching scheme, which is useful to let students learn the skill of particular methods. However, it is hard to pass the original thoughts or reasons why we developed these methods. Here we like to share our experience with problem/data analysis oriented teaching arrangement for an introduction course in our data science program.