

Data is power —The role of Modern Data Science in Industrial Statistics

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Abstract

If Francis Bacon were born today, I could well imagine that he might have said “Data is Power” (instead of “Knowledge is power” in his original saying). Data is everywhere. When data speak, do you understand what data is trying to tell you? This talk attempts to explain (1) What exactly does Data Science really mean, and (2) What is the impact of Data Science to the real world. Statisticians have much more to contribute in both the intellectual vitality and the practical utility of Data Science. At the same time, Data Science challenges statisticians to move out of some familiar habits to engage less structured problems, to become more comfortable with ambiguity, and to engage less scientists in a more fruitful discussion on what the various parties can bring to this new mode of investigation. Some potential directions for future research along this direction will be proposed. Emphasize will be placed on Industrial Statistics.