On Being a Data Skeptic
Data Science for Business Decisions

Assignment Description	You, as a learner, have been exposed to different scenarios* related to how Statistics, Data and Algorithms could be misused in real life. This could be done intentionally (or unintentionally) by an author of an article or by a designer of an algorithm. You can make this world a better place through critical thinking techniques, by using statistics and by applying the scientific method in order to question suspicious claims, hype and hyperbole. As such, please find a recent article (from the last 2 years) about a topic of interest to you that makes a dubious (or flat out wrong) claim (or claims) and demonstrate your understanding of the techniques they used and how you would refute such claims (or make the issues clear to someone else – just like the magic video we watched in class).
Alternatives	Different alternatives are available to you depending on your interest (you can mix and match): 1) It would be great to get a statistics related case (small sample size, unrepresentative sample group(s), …) 2) Data and graphs (visual display of information) 3) Algorithmic issues (such as WMD related challenges – Fairness vs. Efficiency, focusing on one (or few) metric(s) allowing players and users to game the system in order to maximize 4) Mind bugs (biases), such as anchoring, …,
Tools / *Scenarios	Some of the issues: • Selective choice of statistics and/or data (and graphs) to misdirect the reader's attention • Wrong choice of statistical methods to solve a problem • Errors / fallacies in math and statistics (descriptive, graphically, …) You can find some articles to inspire you on our Reading list
Grading	Based on the choice of the originality of article (15%), level of depth and the detail put into your explanation (40%) and rebuttal (45%). Your work should not exceed a maximum of 2 pages in Word (or equivalent)