**Offline Tasks for Nov. 22, 2022**

**Task1: Read the following article**

[17 Most Important Data Science Trends of 2022 (Updated) (datatobiz.com)](https://www.datatobiz.com/blog/top-data-science-trends/)

Its content will be briefly discussed in the Dec. 1 lecture and will be relevant for the COSC 3337 Final Exam.

**Task2:**

**Watch Dana Boyd’s Talk (the first 31:20 minutes of the following video)**

[Plenary: Statistical Imaginaries: An Ode to Responsible Data Science - Microsoft Research](https://www.microsoft.com/en-us/research/video/plenary-statistical-imaginaries-an-ode-to-responsible-data-science/)

**Bonus Task (**This is on optional Task**):**

Discuss (and possibly comment on) one or multiple topics addressed in video, such us the uncertainty in data and its conflict with extracting clear meaning from data, the role of ensuring privacy when collecting data, and the importance of responsible data science.

Next briefly address what you leant from watching Dana’s video and if you agree or disagree with her opinions.

Expected length of your submission: 1 to 1.25 pages (single spaced)

Submission Deadline: Submit your document up to Navid via e-mail by Tu., November 29, 11:59p

Students who successfully complete this task will receive a bonus of 0.8 which will be added to your course number grade average; this could result in you receiving a better grade for COSC 3337. If you do not submit anything, you will just not receive this bonus; that’s all!

**Talk Abstract**

**Danah Boyd: Statistical Imaginaries: An Ode to Responsible Data Science**

Data science is increasingly being used to ground decision-making in both industry and public life. As data become significant and powerful, people who rely on those data come to expect certain things from the data. All too often, data are expected to be precise, neutral, and objective. Those data are expected to speak with confidence—and not reveal their limitations. Left unchecked, data become illusory in the minds of many.

Drawing on her research into the 2020 US census, danah boyd will discuss how illusions surrounding data can be weaponized. She will highlight how the US Census Bureau’s decision to embrace differential privacy as part of its system to protect statistical confidentiality upended what people imagined the work of data to be. She will then turn to discussing the importance of grappling with uncertainty and limitations as a key part of responsible data science.

After this research talk, danah will interview the US Census Bureau’s Chief Scientist, John Abowd, about the challenges the government faces in its effort to modernize federal statistics.

This talk builds on the scholarship of others. Those who are interested in learning more about these themes may value the following work:

Bouk, D. (2015). How Our Days Became Numbered: Risk and the Rise of the Statistical Individual. University Of Chicago Press.  
Daston, L. & Galison, P. (1992). The Image of Objectivity. Representations, 40, 81-128.  
Dwork, C., Kohli, N., & Mulligan, D. (2019). Differential Privacy in Practice: Expose Your Epsilons! Journal of Privacy and Confidentiality, 9(2).  
Jasanoff, S., & Kim, S.-H. (Eds.). (2015). Dreamscapes of Modernity. The University of Chicago Press.  
Porter, T. M. (1995). Trust in Numbers: The Pursuit of Objectivity in Science and Public Life. Princeton University Press.  
Starr, P. (1987). The Sociology of Official Statistics. In W. Alonso & P. Starr (Eds.), The Politics of Numbers (pp. 7–57). Russell Sage Foundation.