

Public-Facing Documentation

Data Ethics: Big Data, Algorithmic Bias, and Research Ethics

This module will discuss data ethics, particularly around big data, algorithmic bias, and research best practices.

Individual Class Info

ENGW 1111 First Year Writing
Emily Avery Miller
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Summary of Module

This module will introduce ethics, including what big data is and how it works, algorithmic bias, and questions and guidelines for ethical research. Big data is the collection of mass amounts of data and the programmatic analysis of this data to categorize and re-categorize patterns of behavior. Algorithms can reinforce implicit and potentially harmful biases, including biases in the data used and collected for algorithms, the choices made in algorithm creation, and the impact of those choices on the people using and being affected by these algorithms in the real world. Particularly, this module looks at biases in academia and the use of non-traditional and non-academic sources in research and writing.

Learning Goals

- Understand the ways in which technologies reflect cultural, social, and political biases.
- Explore the basic processes for machine learning algorithms
- Understand the ways data is being used in society as well as how algorithms impact and shape our daily lives
- Explore the ways in which these questions and methods are influencing how humanists and social scientists do research and practice their craft

Learning Objectives

- Define “big data” and point to different digital technologies that rely on this type of collection and analysis.
- Point to algorithms that are used to make important decisions, like risk assessment algorithms and targeted advertising
- Tackle questions about implicit bias to be used when conducting research, especially in collecting and analyzing data.

- Identify what makes a good and objective source

Materials for Module

[Slides](#)

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