

## Teaching big data management as ethics in action

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The European Big Data Value association claims that there are millions of euros in value in big data waiting to be extracted (<http://www.bdva.eu/>; LaValle et al., 2011). As the rhetoric of various data imaginaries “runs wild” the practical problems of implementing these imaginaries are a significant cause for concern (Kitchin, 2014). The excitement around data does not quite translate to a workforce with necessary skills to navigate an organizational landscape where data hype often does not quite align with what is actually possible and what might even be ethical. In this paper we describe curriculum development for training students to become not only data workers but data stewards, armed with technical knowledge and a critical point of view. Our goal is to introduce students not only to the basic quandaries of big data but to create an environment that teaches the necessary practice of interdisciplinary translation between the technical issues of data management and analytics, the legal issues of compliance and the ability to ask questions that force discussions about the ethics of data. We accomplish this goal through two courses that become a meeting place between STS-trained digital innovation and management students and traditionally educated software development students. Although the courses offer relevant and mostly program-specific instruction, students are asked to work in mixed groups on projects that become a part of their exam. This sort of forced interdisciplinary engagement is not without problems as students learn how to leverage STS critique while managing the nitty gritty of very large messy datasets and somewhat unstable technical infrastructures. Negotiating diverse expertise and learning to recognize the value of working with people who have very different backgrounds becomes an implementation of ethics in action<sup>1</sup> as students work with real data and real problems.

Kitchin, R. (2014a). *The data revolution: Big data, open data, data infrastructures and their consequences*. Sage.

LaValle, S., Lesser, E., Shockley, R., Hopkins, M. S., & Kruschwitz, N. (2011). Big data, analytics and the path from insights to value. *MIT Sloan management review*, 52(2), 21.

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<sup>1</sup> <https://www.nytimes.com/2018/02/12/business/computer-science-ethics-courses.html>