Title: Data +

Abstract: In this talk I will explore how data science is changing the way we practice education and research.

My title Data+ is that of a ten-week summer research experience offered by the Information Institute at Duke (iiD) in which undergraduates join small project teams, working alongside other teams in a communal environment. They learn how to marshal, analyze, and visualize data, as well as how to communicate with the client sponsoring the project. The 2016 program involved about 70 undergraduate students and 30 graduate student and postdoctoral mentors working on 25 projects. I will describe projects that illuminate different ways in which student centered enquiry can transform university institutions.

Our ambition for research is that it impacts society. We used to think of impact as starting with an idea, then developing that idea into a prototype, then turning the prototype into a product, then marketing the product, and so on – it is a long march and the problem with long marches is that most ideas don’t make it. I will describe an example of a different model, one where society is part of the research process. It is a collaboration with Apple on child mental health led by Guillermo Sapiro.