UGBA 96.2/3: Data and Decisions - 2 Units
Fall 2018; Mondays 2-4pm or 4-6pm
Conrad Miller

Course Background
This is a connector course to the Foundations of Data Science course (http://data8.org/). It is designed to be taken at the same time or after the Foundations course.

This course, in combination with the Foundations course, satisfies the statistics prerequisite for admissions to Haas.

Course Description
The objective of the course is to provide an understanding of how data and statistical analysis can improve managerial decision-making. Students learn how to ask the right questions, find or collect relevant data, and apply appropriate statistical methods to solve problems and make better business decisions. We will explore statistical methods for gleaning insights from economic and social data, with an emphasis on approaches to identifying causal relationships. We will discuss how to design and analyze randomized experiments and introduce econometric methods for estimating causal effects in non-experimental data.

To introduce and motivate these methods, we will draw on a variety of business and social science applications, including advertising, management, online marketplaces, labor markets, and education. We will build on the programming tools you develop in Data 8 to analyze real economic and social data.

Prerequisite
For success in this course, concurrent enrollment in or completion of Foundations of Data Science (C8/Statistics 8) and completion of one semester of calculus is highly recommended.

Assessments
This course will include in-class labs, problem sets, a midterm, and a final exam.

About the Instructor
Conrad Miller is an assistant professor in the Economic Analysis and Policy Group at Haas. He received his PhD in economics from the Massachusetts Institute of Technology. He was recently on leave at Airbnb, where he worked as a data scientist and researcher. He can be reached at ccmiller@berkeley.edu.