Data-savvy professionals are in high demand in businesses, public agencies, and nonprofits. The supply of people who can work effectively with data at scale is limited, and is reflected by rapidly rising demand and salaries for data scientists. Data scientist?!? What is that?!? The term didn't exist a mere decade ago, but is now "the sexiest job of the 21st century" (Harvard Business Review, 2012). What is data science? Why does it require expertise from statistics, computer science, and subject matter? What pitfalls lay before us if we ignore one of those competencies? We will explore these questions, among others.