From Academic Science to Data Science: Navigating a New Career Landscape

As a society, we train many more research scientists than we have permanent positions to support. The good news is that we are not wasting our money, or our social resources, or the time and abilities of our bright young minds. A modern foundation in scientific research and data analysis translates directly into a range of alternative career paths. I will focus in particular on the shift I made myself: from research astrophysics to data science, including both a discussion of toolkits and “how-to” advice, as well as mapping out the landscape of the industry. We’ll discuss Data Science versus Data Engineering, Big Data versus “Annoyingly Not Small” Data, careers at large Silicon Valley companies like Apple or Google versus careers in start-up, and ways to figure out which choices might be most interesting for you. We’ll also discuss where Data Science is headed in the next few decades, and the choices that we as a society will need to make as new technologies open up a brave new world of possibilities.