

1154-AE-2851      **Albert Y. Kim\***. *Statistical inference via data science: A "tidy" approach.*

We present a pathway for students to learn statistical inference using data science tools widely used in industry, academia, and government. We first introduce the tidyverse suite of R packages, including the ggplot2 package for data visualization, and the dplyr package for data wrangling. After equipping students with just enough of these data science tools to perform effective exploratory data analysis, we cover traditional introductory statistics topics like 1) multiple regression modeling and 2) confidence intervals and hypothesis testing using simulation-based inference. This approach centers on the use of data visualization and real-world multivariate datasets all throughout. (Received September 17, 2019)