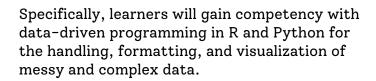# Data Wrangling & Visualization

DATA SCIENCE PROGRAMMING

Current trends among industries are pushing the need for data literacy. **Data Wrangling and Visualization** provides learners with the technical skills needed to competently work with and visualize data.

Specifically, learners will gain competency with data-driven programming in R and Python for the handling, formatting, and visualization of messy and complex data.

- Adapt data from various formats and structures to a desirable format for analysis and visualization (wrangling).
- Create effective visualizations of large and messy datasets using the grammar of graphics with programming (visualization).
- Use current analysis, presentation, and collaboration tools in the data science field (R, GitHub, Python, etc.) to communicate with data scientists and other parties (collaboration).
- Develop confidence in and strategies for completing ambiguous requests (ambiguity).
- Describe where data wrangling and visualization resides within the data science profession (context).

J. Hathaway is a visiting faculty from BYU-I. He manages their data science program and has over 10 years of experience as a data scientist. He fell in love with GGplot2 in 2007 and has taught the tidyverse since 2017.