

Welcome

Prof. Eric A. Suess

August 19, 2020

# Welcome

What is Data Science?

The best description of what Data Science is given by Golemund and Wickham in their book R for Data Science.

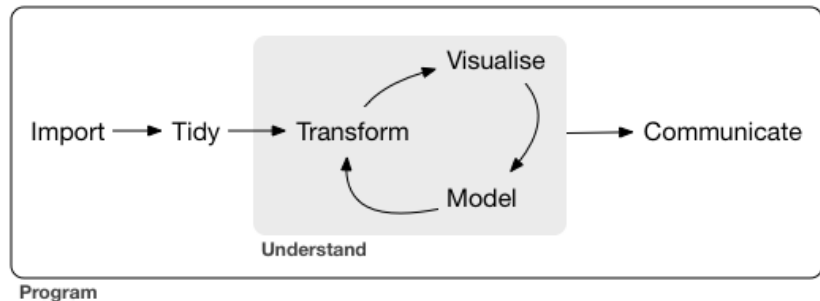
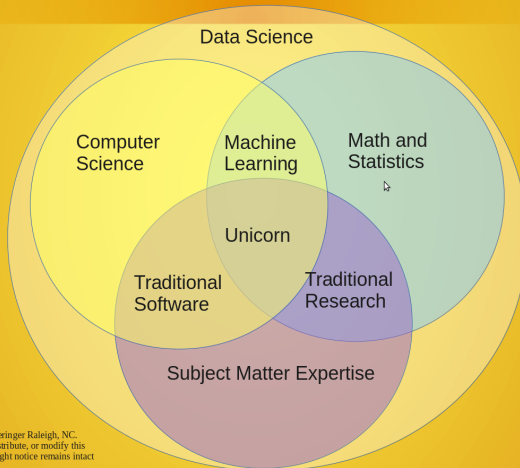


Figure 1:

# Welcome

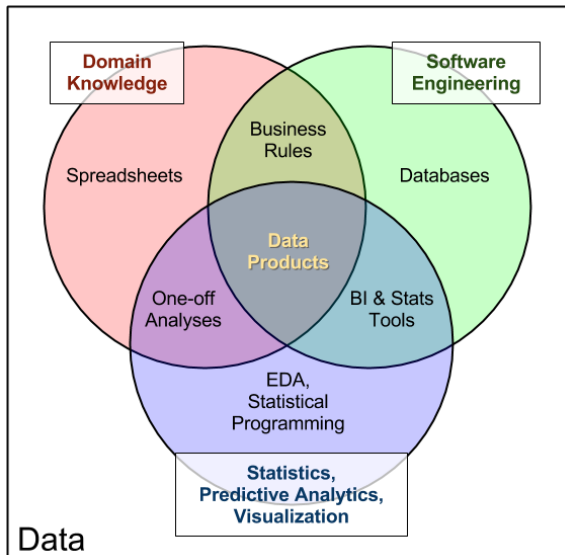
What is Data Science?

## Data Science Venn Diagram v2.0



# Welcome

What is Data Science?

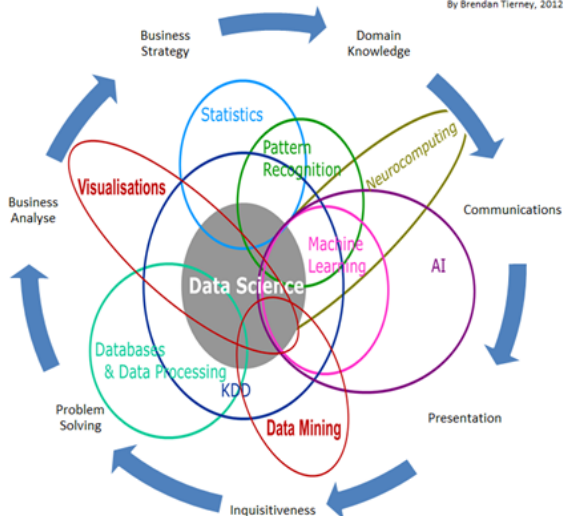


# Welcome

What is Data Science?

## Data Science Is Multidisciplinary

By Brendan Tierney, 2012



# The mdsr package

If you have not already done so you should

1. Download and install R from [r-project.org](https://www.r-project.org)
2. Download and install RStudio [rstudio.com](https://www.rstudio.com)
3. Get an RStudio Cloud account [RStudio Cloud](https://www.rstudio.com/cloud/)

## Start reading the book

- ▶ Read Chapter 1 What is data science?
- ▶ Read the Appendix A, B, and D
- ▶ Install these packages

```
install.packages("tidyverse")
```

```
install.packages("mdsr")
```

# Reproducible Research

We will be practicing Reproducible Research using R Markdown and R Projects.

Or as Hadley Wickham describes it, start “Living a reproducible life.”

1. R Scripts
2. R Notebooks
3. R Projects

(Eventually we will use github to perform version control.)



## Start R and RStudio

Try all of the code in Appendix B and E.