

# Present your Data Science Project

with Rmarkdown

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2019/01/13



Image credit: [rmarkdown package](#)

# rmarkdown

R has excellent utilities for reporting and communication including **rmarkdown** (a method for integrating code, graphical output, and text into a journal-quality report) and Shiny.

To install the rmarkdown package in R:

```
# Install from CRAN  
install.packages('rmarkdown')  
  
# install from GitHub  
devtools::install_github('rstudio/rmarkdown')
```

## RStudio Formats

- Documents (PDF, HTML, Notebook, Word)
- Presentation (ioslides, reveal.js, Slidy, Powerpoint)
- Journals (JSS, ACM, ACS, ctex, Elvesiers Journal)
- Shiny
- More (flexdashboard, bookdown, blogdown, tufte)

# Quick intro `rmarkdown`

- Create a new R markdown from the menu `File -> New File -> R Markdown`

## An R Markdown Document

### First R Markdown

Nor Iffa DF

1/13/2019

#### R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

	speed	dist
## Min.	: 4.0	Min. : 2.00
## 1st Qu.	:12.0	1st Qu.: 26.00
## Median	:15.0	Median : 36.00
## Mean	:15.4	Mean : 42.98
## 3rd Qu.	:19.0	3rd Qu.: 56.00
## Max.	:25.0	Max. :120.00

#### Including Plots

You can also embed plots, for example:

```
---  
title: "First R Markdown"  
author: "Nor Iffa DF"  
date: "1/13/2019"  
output: html_document  
---
```

```
```{r setup, include=FALSE}  
knitr::opts_chunk$set(echo = TRUE)
```

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```
```{r cars}  
summary(cars)
```

#### ## Including Plots

You can also embed plots, for example:

```
```{r pressure, echo=FALSE}  
plot(pressure)
```

# Rpubs

- If you don't want to publish a whole website
- You can just publish R markdown HTML output to Rpubs

Example: [http://rpubs.com/niffadf16/first\\_rmd](http://rpubs.com/niffadf16/first_rmd)

**R**Pubs

brought to you by RStudio

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##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

### Including Plots

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# Examples

- Airbnb uses R Markdown to document all their analyses in R, so they can combine code and data visualizations in a single report. **Bion, Chang, and Goodman 2018**
- Writing blog using `blogdown` Rob J Hyndman's personal website: <https://robjhyndman.com> (a very comprehensive academic website)
- This slide.

# Keep in touch

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# Thanks!

Slides created via the R package **xaringan**