# Introduction to DATA607 CUNY SPS

**Andy Catlin**

**Email** andrew.catlin@sps.cuny.edu
**Work Phone** 616-638-8344
**Office Location** Stuart, FL
**Office Hours** Meetup schedule is posted on site. Please e-mail me to schedule one-on-one office hours.
**Personal Link** http://www.maddogdatascience.com/
**Notes**
Andy Catlin is a successful data entrepreneur and practicing data scientist. He has worked with many global iconic organizations, including the National Football League, Microsoft, ACT, and a number of international commercial and investment banks. His current work centers around collective intelligence--working with like-minded organizations in the same space who are willing to share information to help all participants "get better faster."

## R Markdown from R Studio - Intro

R Markdown provides an authoring framework for data science. You can use a single R Markdown file to both

- save and execute code *generate high quality reports that can be shared with an audience

R Markdown documents are fully reproducible and support dozens of static and dynamic output formats. This 1-minute video provides a quick tour of what's possible with R Markdown:
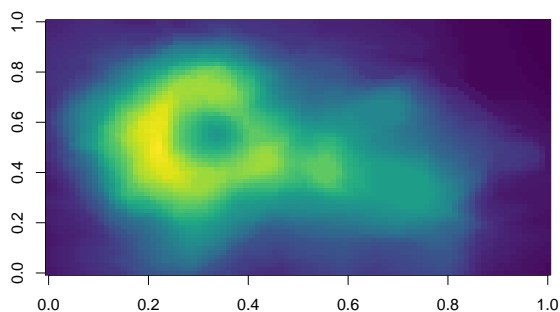
### Installation

Like the rest of R, R Markdown is free and open source. You can install the R Markdown package from CRAN with:
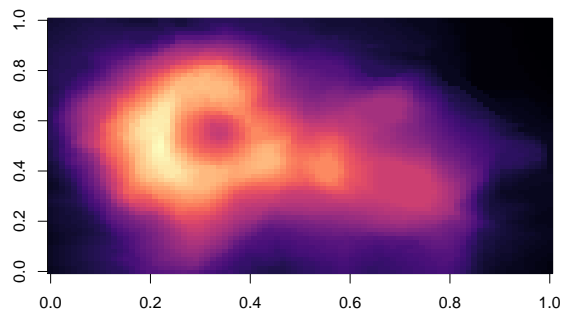
```
install.packages("rmarkdown")
```

R Markdown Cheatsheet R Markdown Reference Guide

## Viridis colors

Code below demonstrates to color palettes in the viridis package. Each plot displays a contour map of the Maunga Whau volcano in Auckland, New Zealand.

**Magma colors**



```
colorFunc <- "heat.colors"
# colorFunc <- "terrain.colors"
# colorFunc <- "topo.colors"
# colorFunc <- "cm.colors"
# colorFunc <- "rainbow"
```
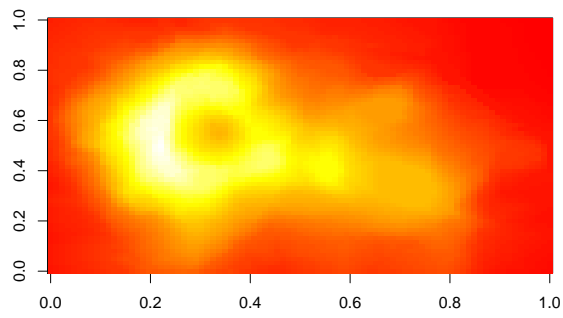


Figure 1: Heat color example

## Simple Demo languages

### Bash

```
ls *.Rmd
```

### Python

```python
x = 'hello, python world!'
print(x.split(' '))
```