

# Data Mining with Python

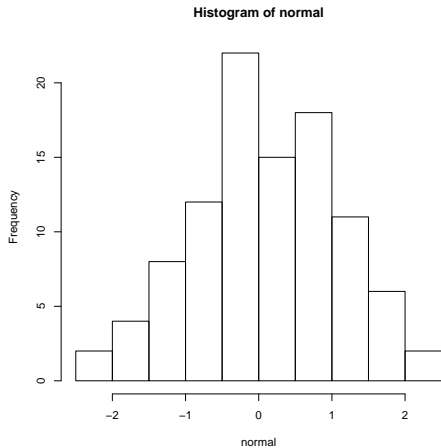
Most of the work is in preparing the data

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# Statisticians *love* data visualizations



# This is the second slide

Here is where I would write a bunch of text. Visit the course website<sup>1</sup>

## Summary

Programming is super fun.

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<sup>1</sup><https://github.com/nick-ulle/2015-python-course>

Powerpoints should always contain  $n$  bullet points

- Bullet 1
- Bullet 2
- ...
- Bullet  $n$

## Makefile in progress here!

```
1 # could make a figures directory
2 # figs := $(wildcard figs/*.pdf)
3 
4 
5 pres.pdf : pres.tex figs/normal.pdf
6     pdflatex pres.tex
7 
8 figs/normal.pdf : normal.R
9     R CMD BATCH --vanilla normal.R
10 
11 clean :
12     rm *.aux *.log *.nav *.out *.snm *.toc *.Rout
~
~
```

This is a screenshot, a PNG file.

## Evolving Makefile contents

```
pres.pdf : pres.tex figs/normal.pdf  
    pdflatex pres.tex
```

```
figs/normal.pdf : normal.R  
    R CMD BATCH --vanilla normal.R
```

```
clean :  
    rm *.aux *.log *.nav *.out *.snm *.toc *.Rout
```

## Evolving Makefile contents

```
# Everything in the 'figs' directory  
figs := $(wildcard figs/*)
```

```
pres.pdf : pres.tex $(figs)  
    pdflatex pres.tex
```

We have gained a bit of abstraction by specifying that `pres.pdf` depends on everything in the `figs` directory.

Here's some random math thing.

$$f(x, n) = \sum_{i=1}^n xi^2 + 23x + \pi$$

More text after.