

A photograph of a narrow, cobblestone street in Lisbon, Portugal. A yellow tram with the number '28' is visible in the distance. The street is flanked by colorful buildings with balconies. In the background, a church tower with a crenelated top is visible. The text 'Data Science 2018' is overlaid on the right side of the image.

Data Science 2018

# About me (Manuel Garrido)

Data Scientist

CTO @ [TribeClick](#) and Professor at [Lisbon Data Science Academy](#) and [ENAE](#)

Consultant → Analyst → Data Scientist  
Excel - Excel VBA - R - Python

manugarri.com

hola@manugarri.com



# About me (Sean Wade)

Student BYU researching Reinforcement Learning

Applied Math Undergrad

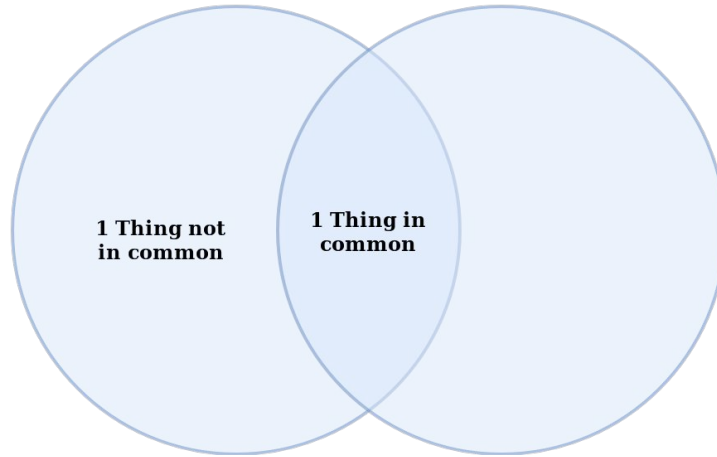
Drone Computer Vision for MIT Lincoln Labs and Loveland Innovations -> ML Engineer for Disney

[seanwade.com](http://seanwade.com)



# About you

In groups of 4 , introduce to each other find one thing in common and one thing you don't



# About the program

## Topics covered in this program:

1. Programming in Python
  2. Unix
  3. Exploratory Data Analysis
  4. Data Visualization
  5. Statistics
  6. Machine Learning
- Practical Program, *with just the necessary amount of math.*
  - Challenging, but let us know if it's too easy/hard
  - Some computing power required.
  - Participation is encouraged (*No stupid questions, No wrong answers*).
  - Internship information will roll in on week 2
  - **Enjoy Lisbon!**



# Intro to Python





# Python Facts

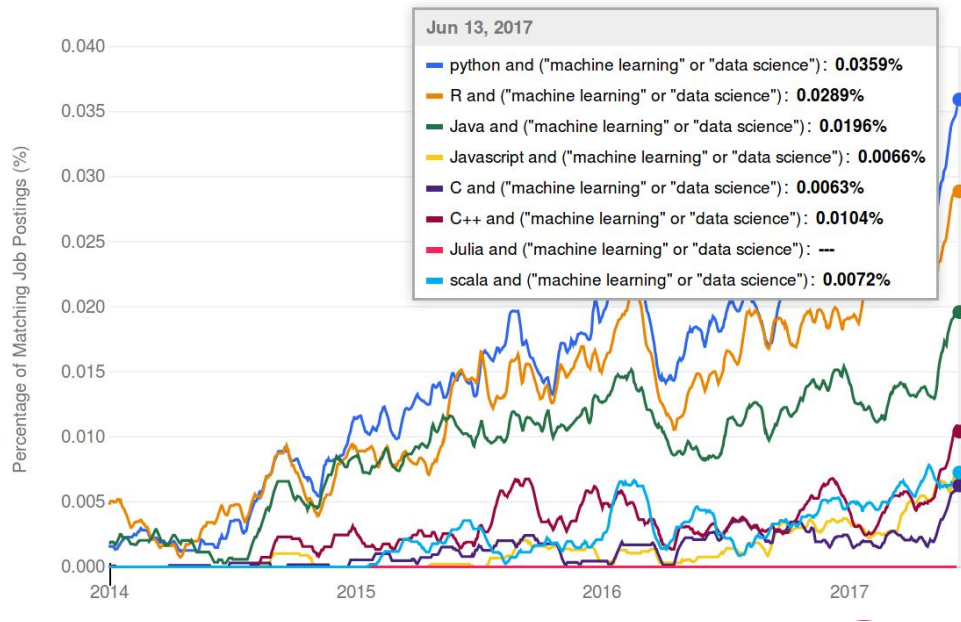
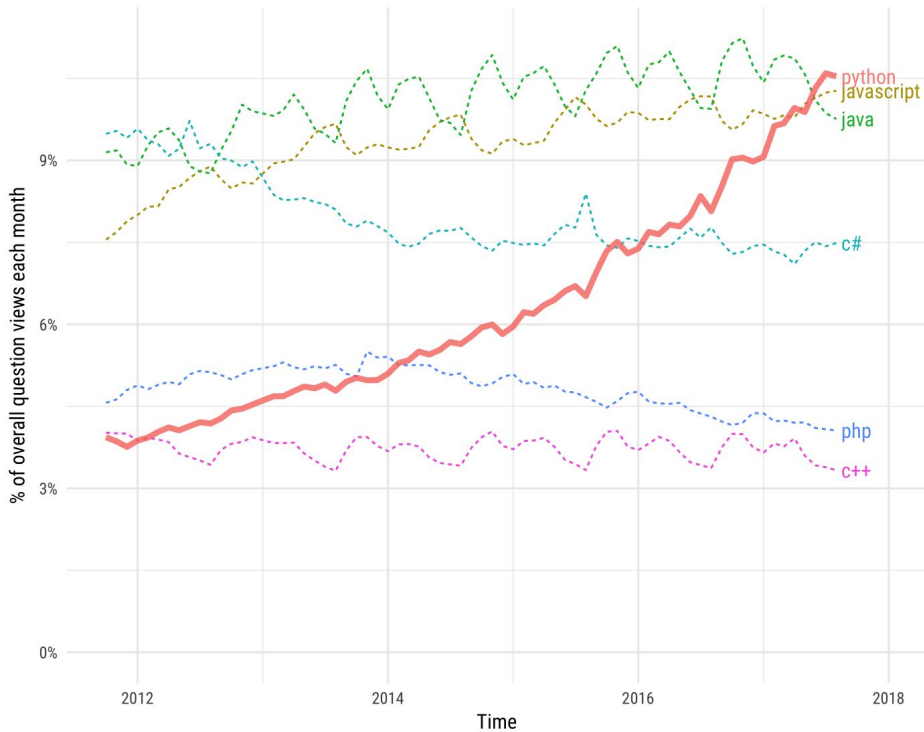
- Programming Language created by Guido Van Rossum in 1991
- Developed by the [Python Software Foundation](#)
- Interpreted, object oriented language
- Focus on readability and “*batteries included*”
- Current version: 3.6.5
- ¿Python 2 or [Python 3](#)?



# Python for Data Science

## Growth of major programming languages

Based on Stack Overflow question views in World Bank high-income countries



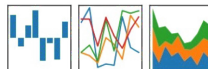




And many,  
many more...



pandas  
 $y_{it} = \beta'x_{it} + \mu_i + \epsilon_{it}$



matplotlib



IP[y]:  
IPython



# How to find help

- Ask your instructors
- ¡Google!
- [Stack Overflow](#)
- Reddit ([/r/learnprogramming](#) or [/r/learnpython](#))
- [IRC](#) (#python channel)



Show time!

