

# Intro to Engineering Applications of Python

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# Agenda

#### **Presentation**

- 2 min: Python Background

- 3 min: Python Resources

- 2 min: Questions

#### Coding

- 5 min: Basic Python

- 15 min: Intro to Pandas, Numpy and Scipy

## Why does everyone like Python?

- 1. Python Has a Healthy, Active and Supportive Community
- 2. Python Has Some Great Corporate Sponsors
- 3. Python Has Big Data
- 4. Python Has Amazing Libraries
- 5. Python Is Reliable and Efficient
- 6. Python Is Accessible



# **NETFLIX**



# Google

Who uses Python?









## How do I learn Python?



**Learn Python:** <a href="https://www.learnpython.org/">https://www.learnpython.org/</a>

Codecademy: <a href="https://www.codecademy.com/">https://www.codecademy.com/</a>

### How did YOU learn to code?

**Syntax** 

**Algorithm Development** 

**Code Structure** 

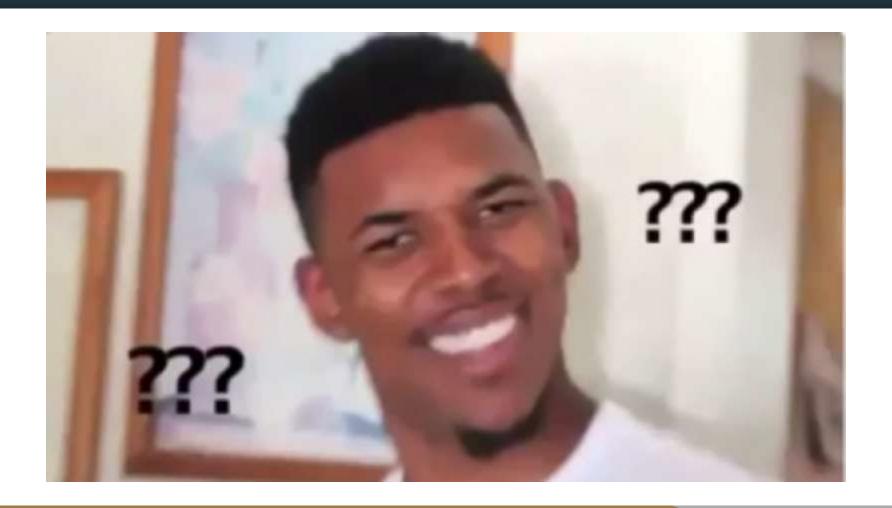
**PRACTICE** 

**Contributing to Open-Source Projects** 

Okay... that's great but how do I master Python?

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You don't.





Programming is HARD. Luckily there are GREAT resources!



#### Documentation!

The BEST place is start is the docs! Every Library in Python has corresponding documentation explaining how to use it.

Pandas: https://pandas.pydata.org/pandas-docs/stable/

Numpy: <a href="https://docs.scipy.org/doc/numpy-1.13.0/reference">https://docs.scipy.org/doc/numpy-1.13.0/reference</a>

Scipy: <a href="http://scipy.github.io/devdocs/hacking.html/">http://scipy.github.io/devdocs/hacking.html/</a>









## Jupyter



#### Go to <a href="https://ubc.syzygy.ca/">https://ubc.syzygy.ca/</a>

Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text.

## Above and Beyond

Visual Studio Code

Anaconda

Github

SourceTree

Command Line

# Questions?