#### Python for Data Analysis

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UC Davis - Statistics

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## Today's Plan

- 1. Introduction
- 2. Course Overview
- 3. Demonstration
- 4. Git

#### Team

#### Instructors

Nick Ulle, Clark Fitzgerald

#### **Assistants**

Randy Lai, Karen Ng (Physics)

#### **Professors**

Duncan Temple Lang, Wolfgang Polonik

## What is Python?

A high level, general purpose programming language

## Why learn Python?

## Why learn Python?

You tell me:)

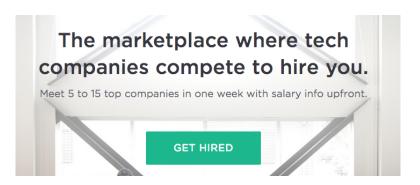
## Why learn Python?

- Popular
- Powerful
- Fast Development

## Popular

- Free and open source
- Stable Invented in 1989
- Available for Windows, Mac, Linux
- Widely used in industry and academia

#### Hired.com



#### Hired.com

What skill sets are you looking for?

Generally speaking, developers with strong knowledge of iOS, Android, Python or Ruby.<sup>1</sup>



<sup>1</sup>https://hired.com/candidates/faq

### **Powerful**

- Dropbox, Youtube originally written in Python
- 'Glue language'
- Mature scientific data analysis capabilities

## Fast Development

- Readability counts
- Good choice for startups or scientific work

### Course Overview

Objectives: Introduce the language and relevant data analysis packages including Numpy, Pandas, Matplotlib, and others.

- 8 class meetings: 2 3:30 Tues, Thurs
- 4 assignments

#### **Outcomes**

- Basic understanding of Python
- Ready to apply Python to other work
- Read technical documentation

### **Technical Details**

- Using Python 3
- We recommend the Python 3 distribution from Anaconda
- Use your preferred development environment -Spyder, Ipython notebooks, QT console, or terminal. (We'll explain these)

## Expectations from you

- Ask open ended questions
- Type, type, type!
- Work with your neighbors
- Use Piazza

Come for the language, stay for the community.

# Skills for wise.io DevOps engineer<sup>2</sup>

- Expertise in Python.
- Experience with Git version control
- Experience implementing JSON / RESTful APIs.

