

# Python and R

@John Aoga

IFRI Master 2023-2024

# PART 1

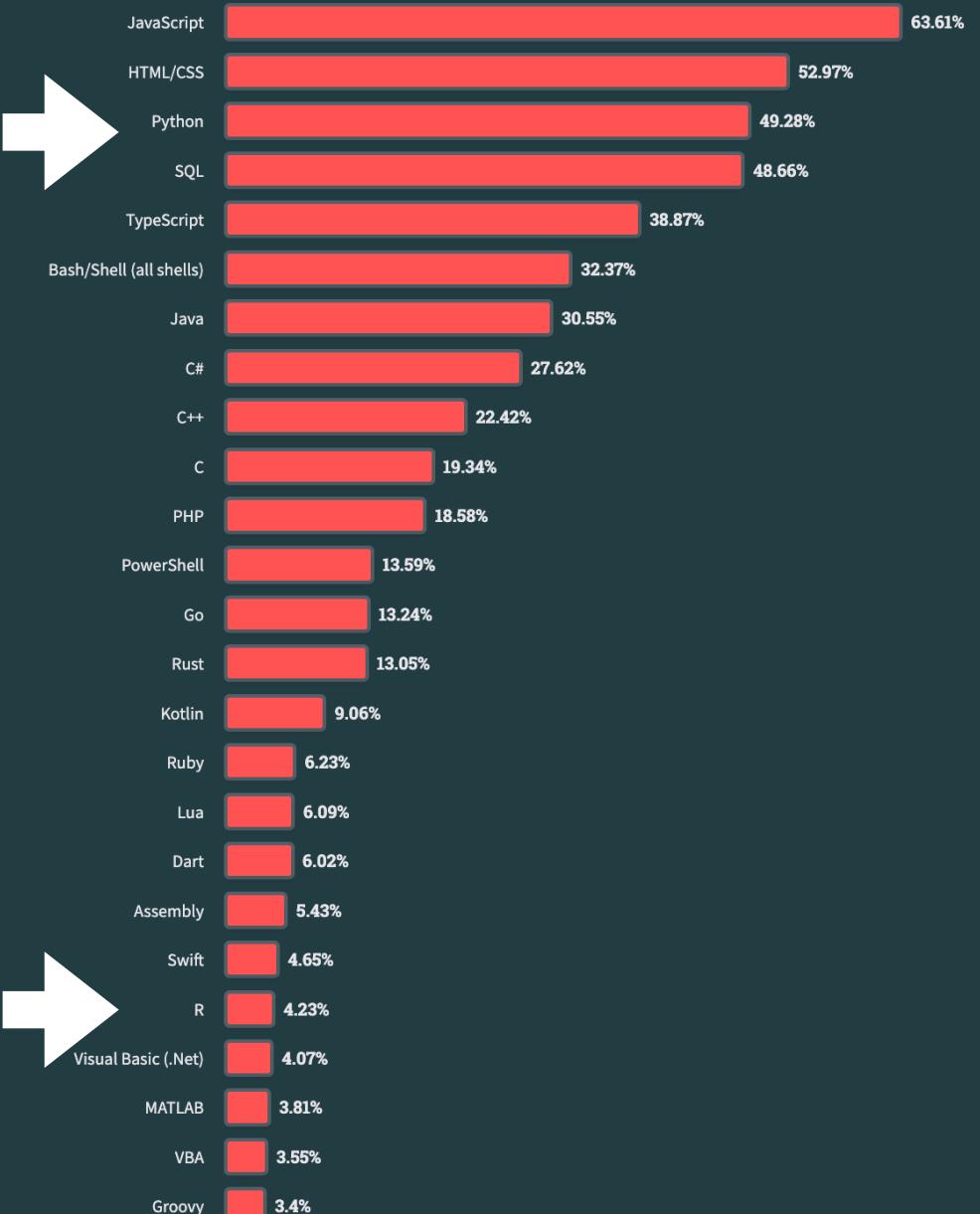
Introduction and Basic Programming

# Chap.1

Introduction

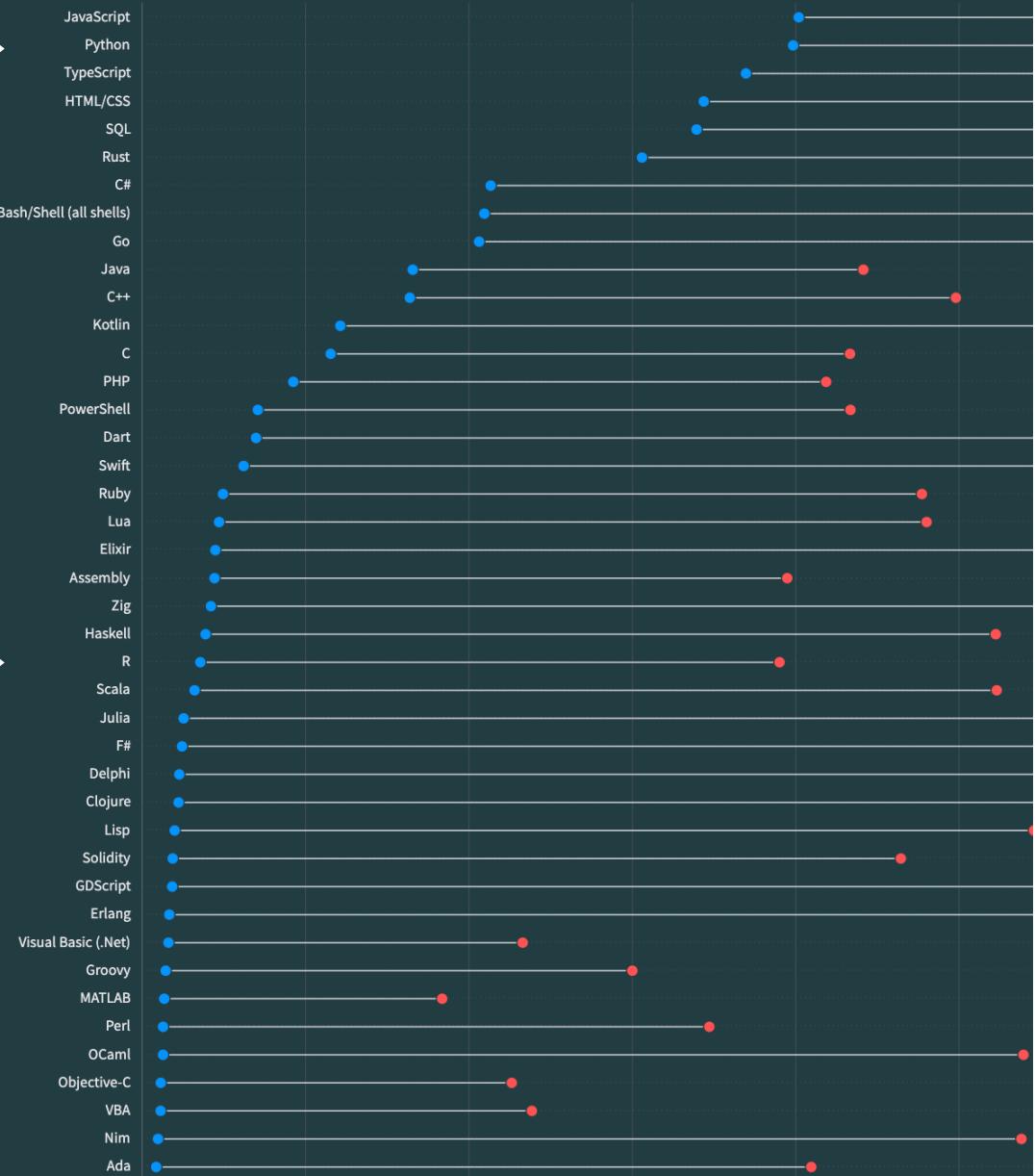
# Introduction (1/3)

## Python and R Usage Statistics



# Introduction (1/3)

## Python and R Loves/Dreaded Statistics



# Introduction (1/3)

## Python and R Jobs Statistics



What is your current total annual compensation (salary, bonuses, and perks, before taxes and deductions)? Please enter a whole number in the box below, without any punctuation. If you are paid hourly, please estimate an equivalent yearly salary. If you prefer not to answer, please leave the box empty.

## Popularity Rankings, Python vs. R



Python



R

2016

#3

#5

2017

#1

#6

2018

#1

#7

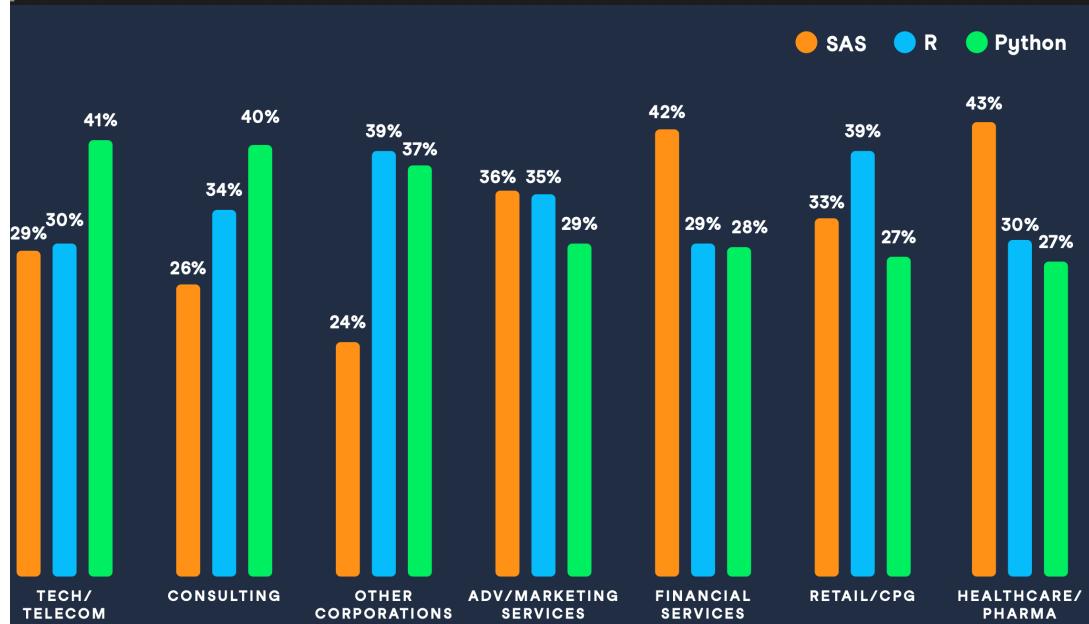
2019

#1

#5

Source: IEEE Spectrum, Sep 2019

## Introduction (2/3)



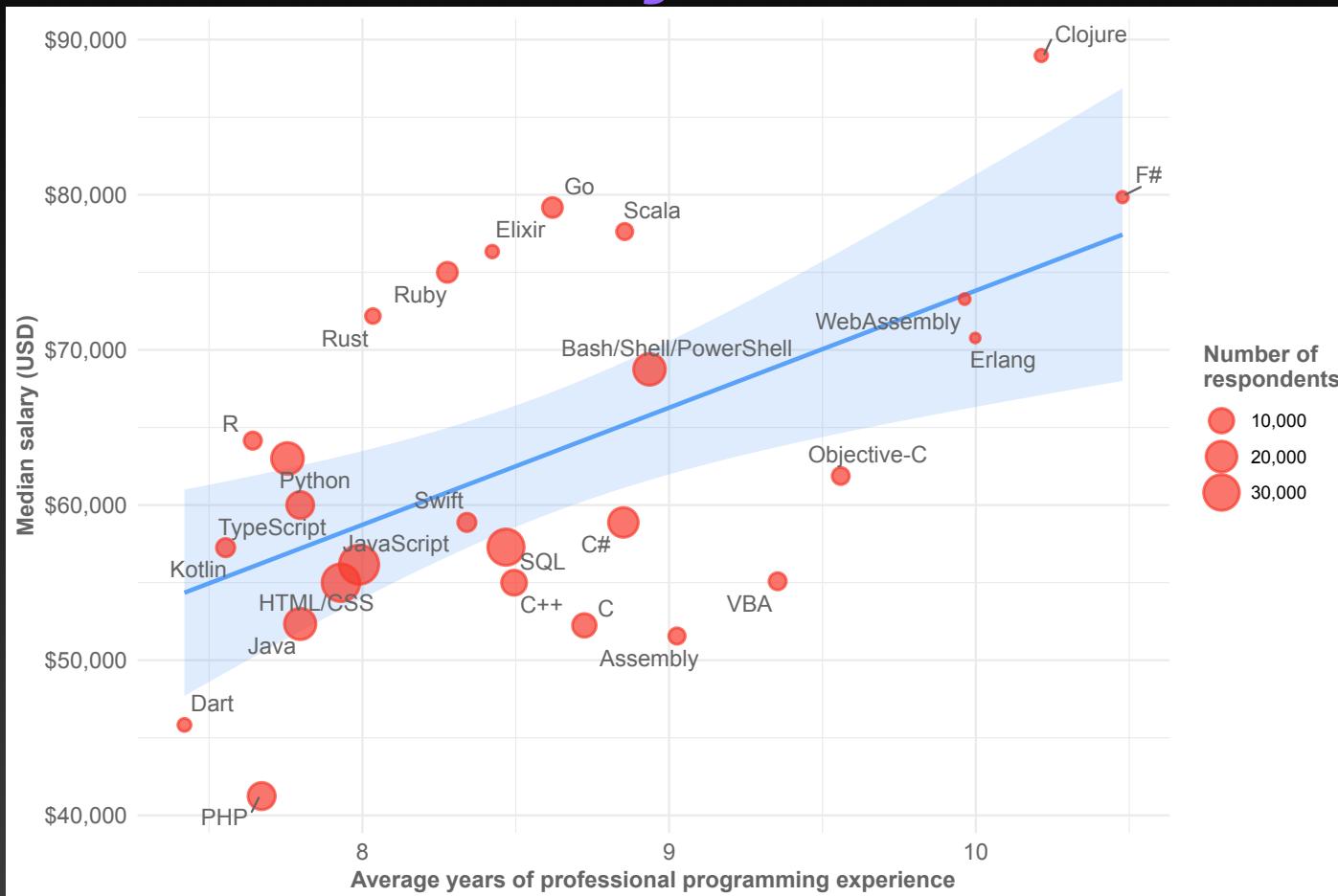
Python and R in DS Statistics

# Introduction (3/3)

## Python and R Salary Statistics

# Introduction (3/3)

## Python and R Salary Statistics (older)



# Introduction (3/3)

## Other stats

- Programming stats

<https://insights.stackoverflow.com/survey>

- Data science stats:

<https://www.datacamp.com/blog/python-vs-r-for-data-science-whats-the-difference>

- comparison

<https://s3.amazonaws.com/assets.datacamp.com/email/other/Python+vs+R.pdf>

# Setting up Python and R

- Anaconda (Python): <https://www.anaconda.com/products/distribution>
- Jupyter Notebooks: <https://jupyter.org/install>
- R: <https://cran.r-project.org/>
- RStudio: <https://www.rstudio.com/products/rstudio/download/>

# Practice - Environment Setup

**Basic task:**  
**Run Python and R environments.**

# Chap.2

Basic of Python Programming

# Python Cheatsheet

<https://www.datacamp.com/community/tutorials/python-data-science-cheat-sheet-basics>

# Python Exercises for Beginners:

<https://www.w3resource.com/python-exercises/>

# Chap.3

Basic of R Programming

# R Cheatsheet:

<https://rstudio.com/wp-content/uploads/2016/10/r-cheatsheet-3.pdf>

# R Exercises for Beginners:

<https://www.r-exercises.com/start-here-to-learn-r/>

# Comparison Guide of R and Python:

<https://www.datacamp.com/community/tutorials/r-or-python-for-data-analysis>