

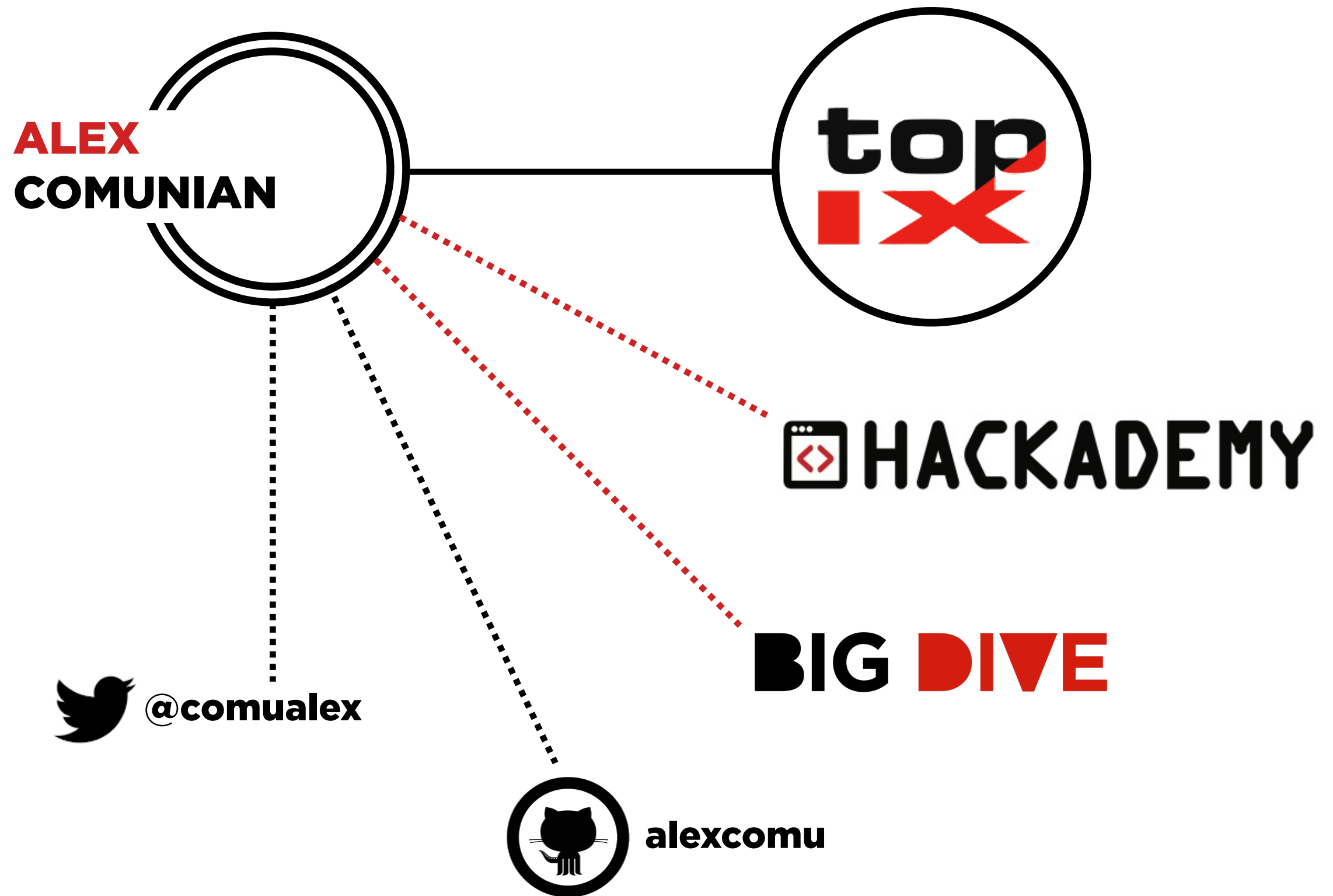


BIG DIVE
DATA SCIENCE & ANALYTICS

DEV TOOLS
FOR DATA

Designed for

INTESA  SANPAOLO



AGENDA

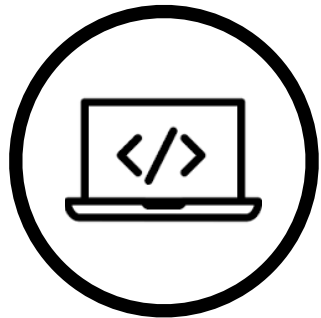
/ DATA DEVELOPMENT

/ REQUIREMENTS

/ DEVDATA AGENDA

**/ GIT & NOTEBOOK
INTRODUCTION**

DATA SCIENTIST ROLE



DEVELOPMENT

Software development
Database
Cloud knowledge
Framework & Platform

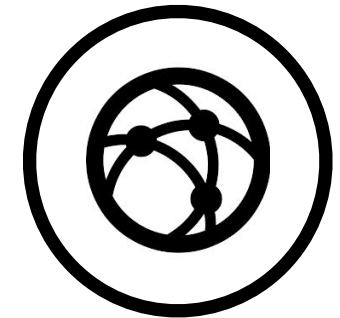
...



DATAVIZ

Theory & Concepts
Tool
Computational design

...



DATA SCIENCE

Statistics
Machine Learning
Network science
Semantic

...



LEGAL

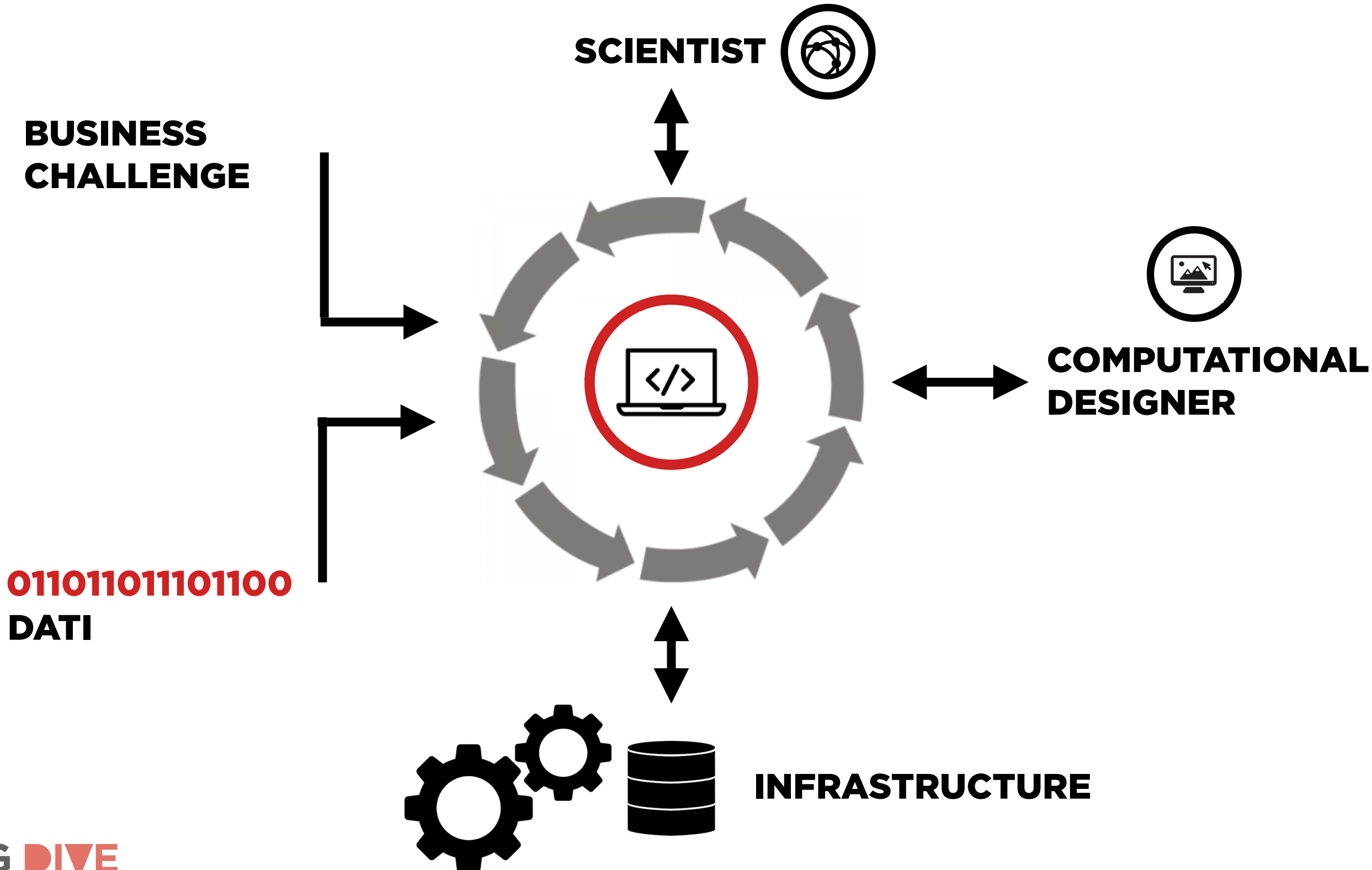
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Competenze di SETTORE

FOCUS ON **COMPUTER SCIENTIST**



BIGDIVE

REQUIREMENTS

BIGDIVE REQUIREMENTS

/ Linux OS

/ python 2.7+

/ ANACONDA Suite

/ GITHUB Account

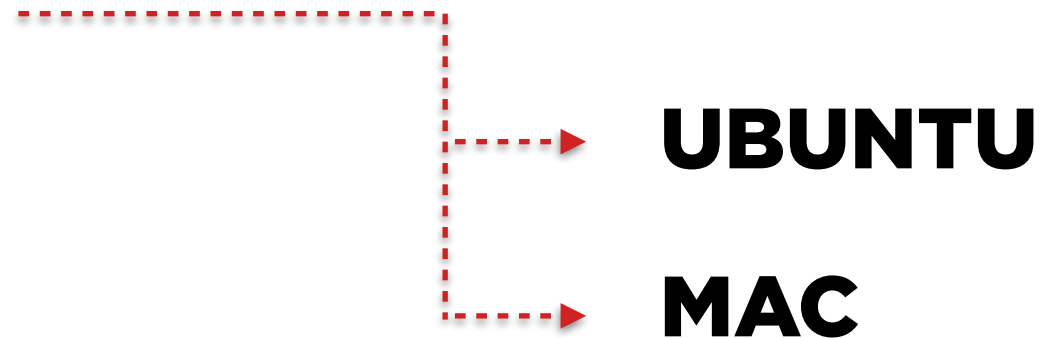
BIGDIVE REQUIREMENTS

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BIGDIVE REQUIREMENTS

/ Linux OS

/ **python 2.7+**

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WHY PYTHON IS SO SEXY?

WHY **PYTHON** IS SO SEXY ? (1)

PYTHON

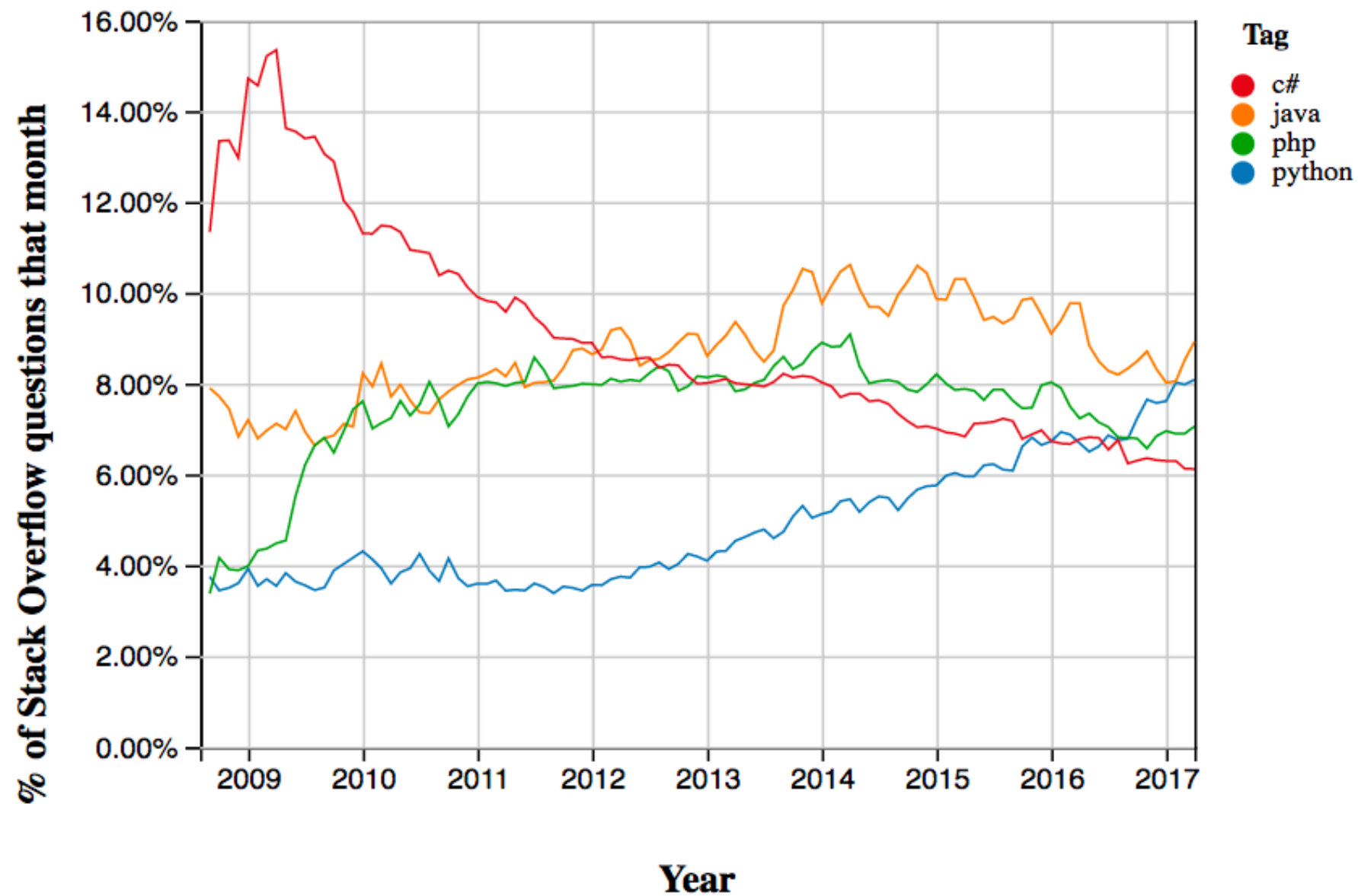
```
print("Hello World")
```

JAVA

```
public class HelloWorld{  
    public static void main(String[]  
args){  
        System.out.println("Hello  
World");  
    }  
}
```

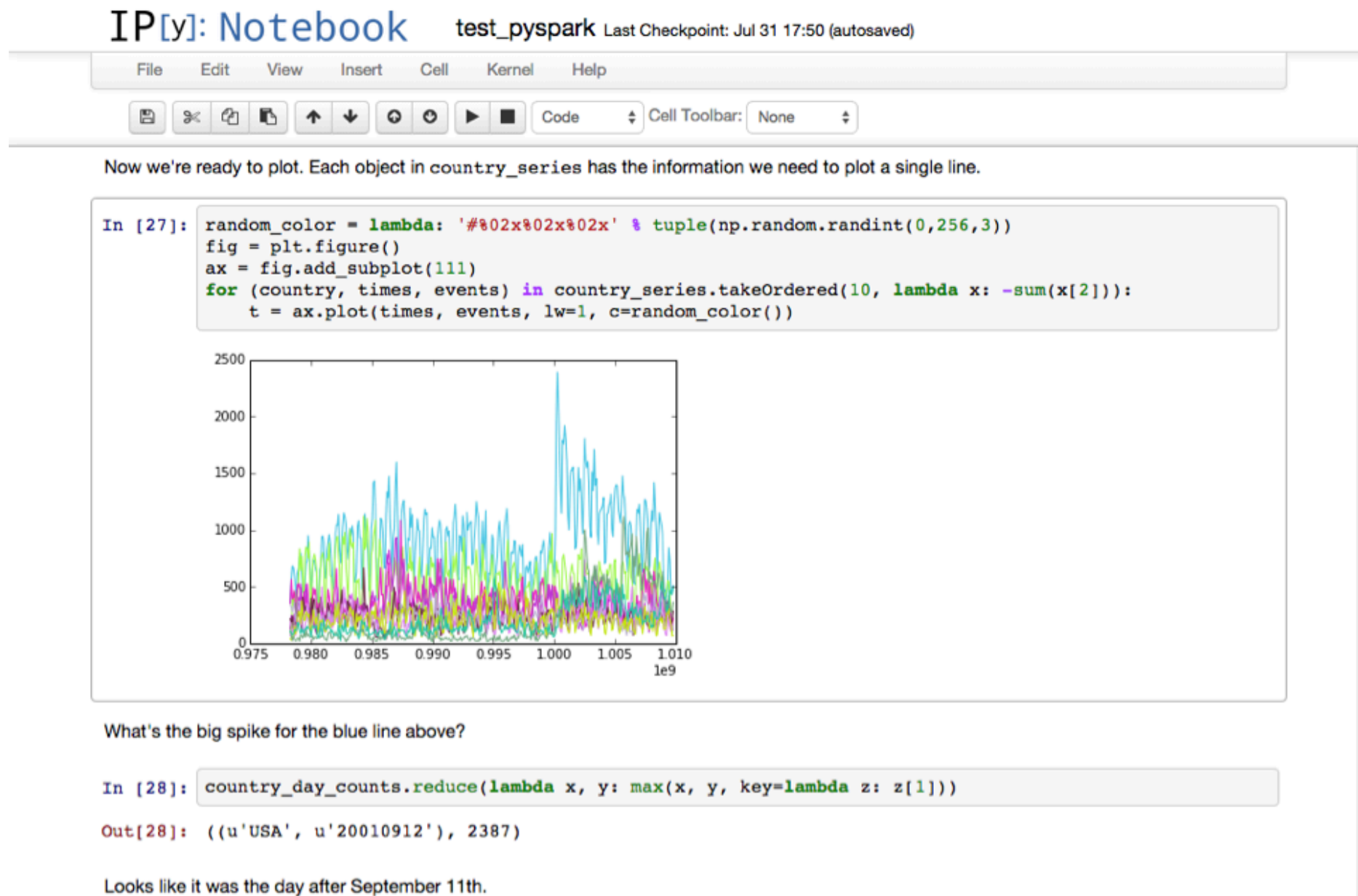
**FAST LEARNING AND
“EASY” SYNTAX**

WHY **PYTHON** IS SO SEXY ? (2)



**GROWING ADOPTION &
LARGE COMMUNITY**

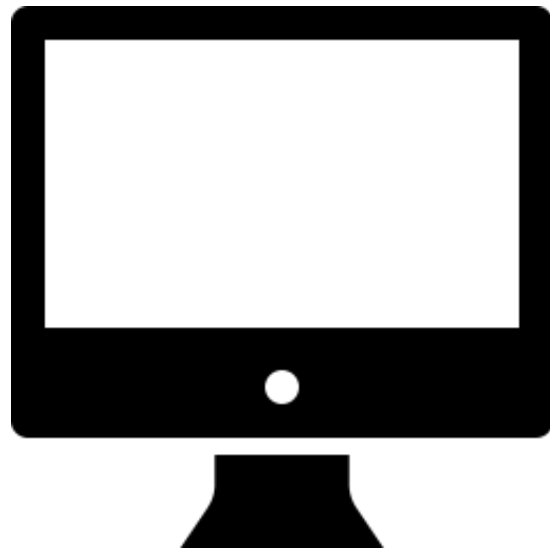
WHY PYTHON IS SO SEXY ? (3)



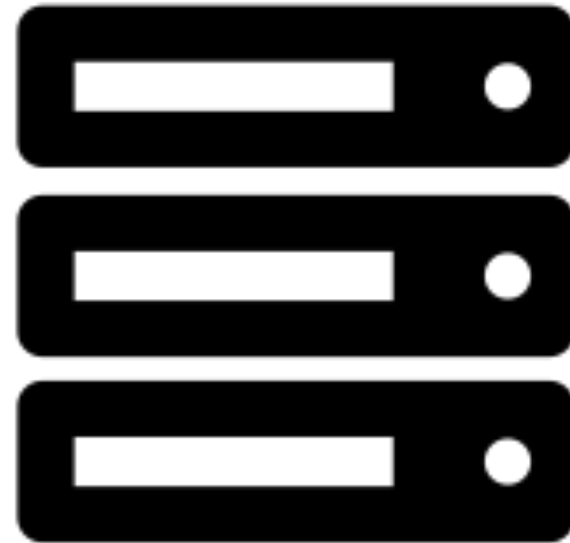
**EFFECTIVE TRAINING +
PLUG&PLAY TOOLS**

WHY **PYTHON** IS SO SEXY ? (4)

BACKEND



FRONTEND



FULL STACK

ARE YOU A PYTHON BEGINNER?

EAT

~~**SLEEP**~~

<CODE>

REPEAT

BIGDIVE REQUIREMENTS

/ Linux OS

/ python 2.7+

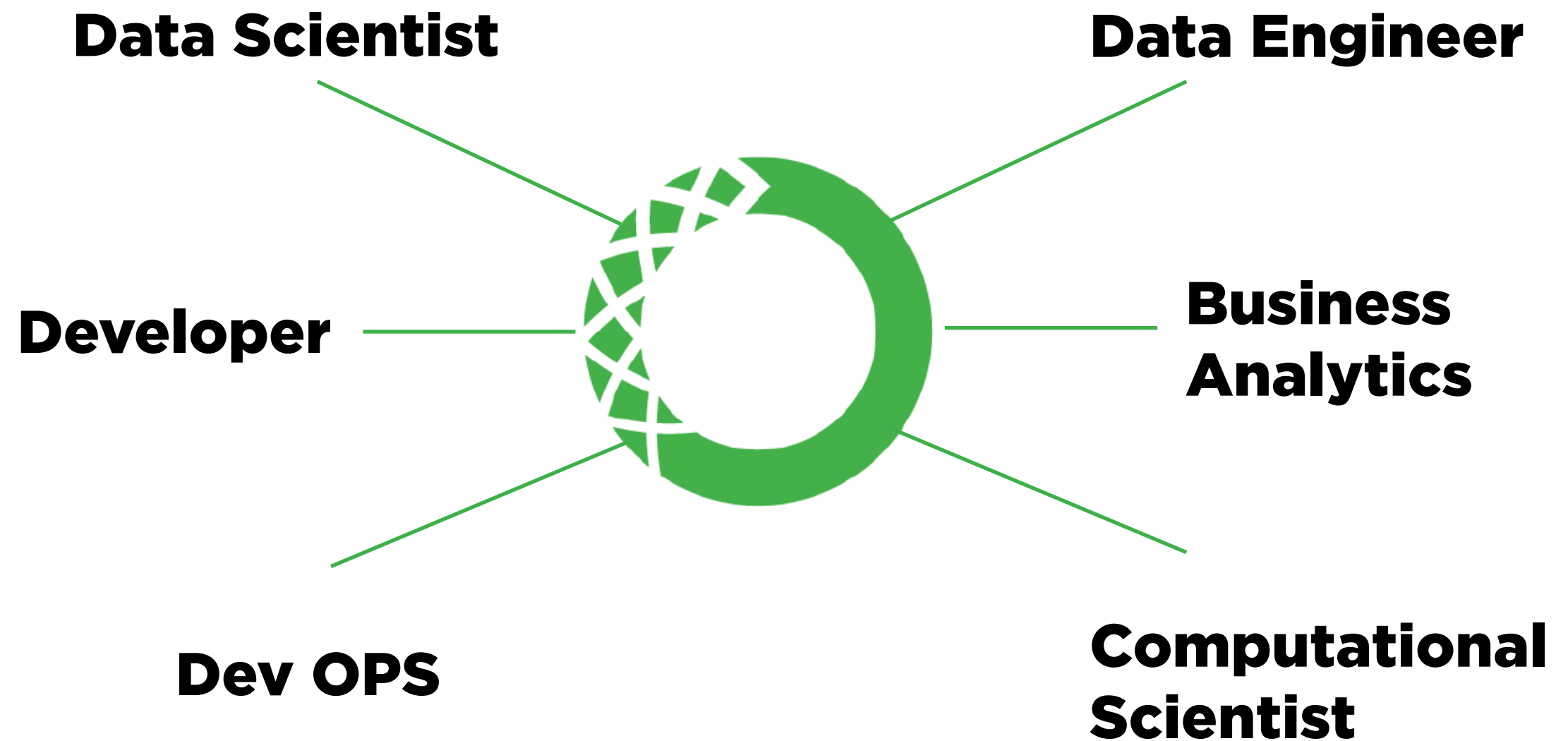
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/ GITHUB Account



ANACONDA®

ANACONDA



ANACONDA

Data Scientist

- / Advanced Analytics with Python & R
- / Python Notebooks
- / Simplified Library Management

Data Engineer

Developer

Business
Analytics

Dev OPS

Computational
Scientist

BIGDIVE REQUIREMENTS

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/ python 2.7+

/ ANACONDA Suite

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GIT ??

! NO SPOILER

DEVDATA COURSE

DATA-DEV TRACK



**ANDREA
BECCARIS**



**ALEX
COMUNIAN**



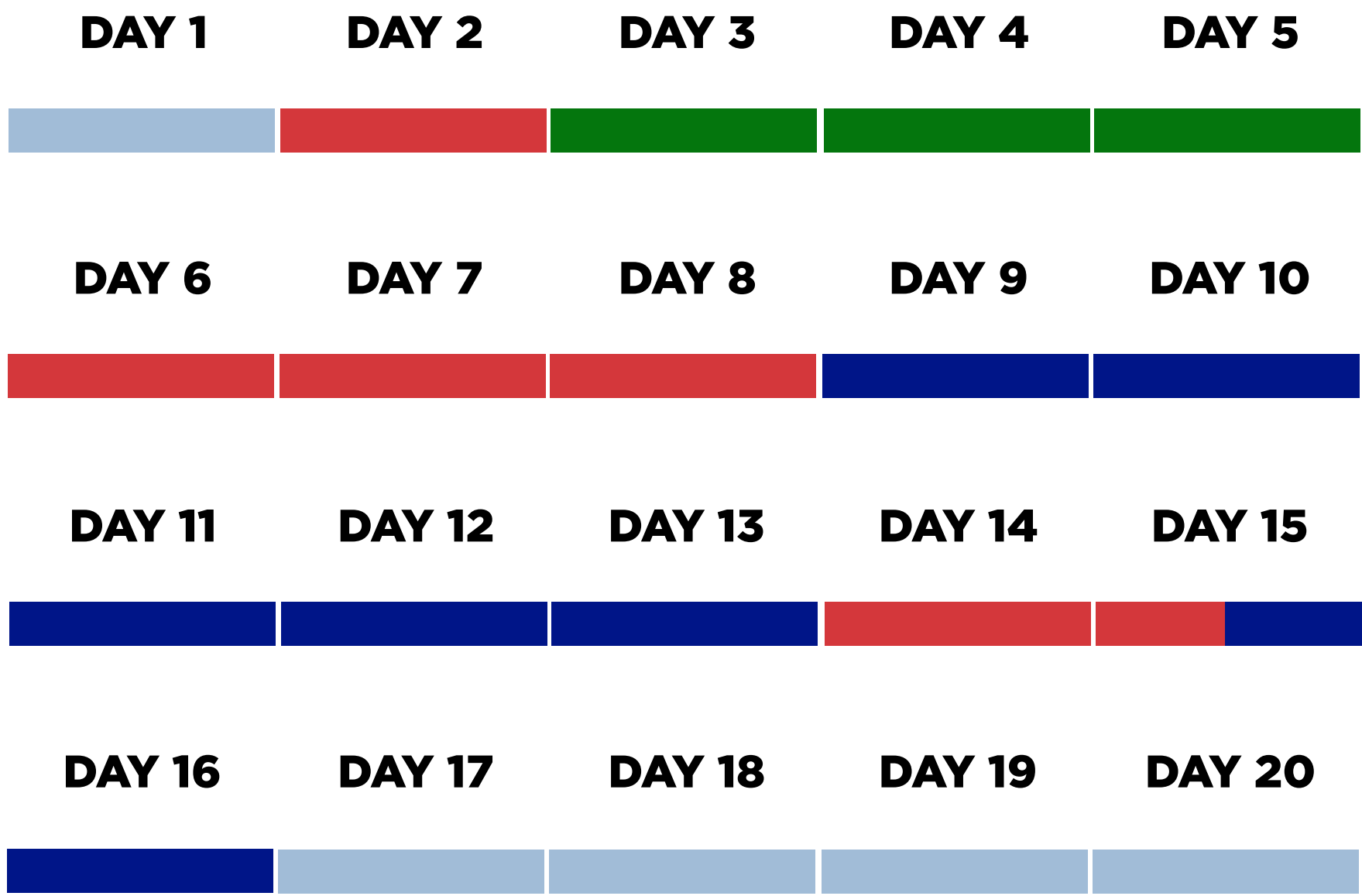
**STEFANIA
DELPRETE**



**ANDREA
SPEZIALE**



COURSE OVERVIEW



Intro & Prj

Dev & Frwk

Data Viz

Science

Mon-Tue

09:30
16:30

DEVDATA OVERVIEW

DAY 2	<i>10 ottobre</i>	Python essentials + HTML, CSS, Javascript “Hello World”
DAY 6	<i>24 ottobre</i>	Numpy and Pandas
DAY 7	<i>30 ottobre</i>	Framework: Hadoop, Spark and Hive
DAY 8	<i>31 ottobre</i>	Framework: Hadoop, Spark and Hive
DAYS 14-15	<i>21-27 novembre</i>	Scaling Python / Working with API

DATA-DEV PROGRAM

INTRODUZIONE (1h)

- / Introduzione al Data-Driven Development.
- / Gestire l'ambiente di virtualizzazione.
- / Introduzione ad Anaconda.
- / GIT.

LEZIONE 1 (4h)

- / Jupyter Notebook.
- / Introduzione a Python:
 - Sintassi e indentazione.
 - Prima esplorazione della standard-library.
 - Strutture dati.
 - Manipolazione file.
 - Esercizi.

DATA-DEV PROGRAM

LEZIONE 2 (6h)

/ Python for statistics and science:

- Introduzione a PANDAS: Series & Dataframes.
- Pandas Hands-On.
- Introduzione a NumPy e SciPy.

LEZIONE 3 (8h)

/ Python and API:

- Integrazione API Social: Twitter Example.
- Come creare un Python Package.
- Web Server: Flask e esposizione servizi API.

GIT INTRODUCTION

GIT INTRODUCTION



GIT INTRODUCTION



**Version Control System for
software development**

GIT INTRODUCTION



Repository / Container for **code**

TRY.GITHUB.IO

GITHOWTO.COM

GIT INTRODUCTION

/ BDINTESA repository:

<https://github.com/BIGDIVE/BDINTESA2>

**Repository used to
share notebooks
and utils from
teachers.**

 [datascience](#)

 [development](#)

 [pre-course](#)

 [visualization](#)

 [.gitignore](#)

 [README.md](#)

 [contacts.md](#)

GIT INTRODUCTION (1)

/ CLONE REPOSITORY

```
git clone https://github.com/BIGDIVE/BIGDIVE6
```

GIT INTRODUCTION (1)

/ CLONE REPOSITORY

git clone <https://github.com/BIGDIVE/BIGDIVE6>

/ LOAD CHANGES

git pull

GIT INTRODUCTION (1)

/ CLONE REPOSITORY

git clone <https://github.com/BIGDIVE/BIGDIVE6>

/ LOAD CHANGES

git pull

/ CHECK LOCAL CHANGES

git status

GIT INTRODUCTION (2)

/ ADD CHANGES

git add *

GIT INTRODUCTION (2)

/ ADD CHANGES

git add *

/ COMMIT CHANGES

git commit -m 'New Changes!'

GIT INTRODUCTION (2)

/ ADD CHANGES

git add *

/ COMMIT CHANGES

git commit -m 'New Changes!'

/ PUSH CHANGES

git push

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www.bigdive.eu

@top_ix
@bigdive_eu
@comualex

THANKS!