# **Python Fast Track**

# How Python Fast Track is different from others training?

Python is one of the most demanded skills within Financial Industry today. Many people trying to learn Python, however most of the online contents are very engineering and data science oriented. They usually include topics that may not be used for day to day analysis.

Python Fast Track is the core and essential part of **Full Python Learning Series** provided by Bloomberg BQuant Team. It is intended to provide an efficient route to start using Python for daily analysis.

In four weeks, it will cover all the Python essentials as well as one of the most important topics: how to retrieve the data from Bloomberg directly with Python.

# **Technical Preparation**

NO NEED to manually install Python, Anaconda and Python Packages by yourself.

If you have Bloomberg installed on your PC, run {BQNT <GO>} on the Bloomberg terminal, then everything should be ready to go. BQNT is open source-based platform, so everything you learned could be applied to other places too. In addition, you will also have exclusive easy to use tools and packages, such as BQL for data retrieving, BQVIZ for easy charting and Community Publishing to share your analysis via Bloomberg Launchpad.

If you are not enabled with BQNT, please contact your account manager or your BQNT rep. BQNT is FREE with Bloomberg Anywhere terminal (buy-side users only).

#### **Learning Format**

#### Self-pace:

Learning guide, coding projects, tutorial videos are provided for self-study. The topics are bite size to be beginner friendly. You may spend 15-20 minutes a day, three days a week to smoothly picking Python essentials.

#### Webinars:

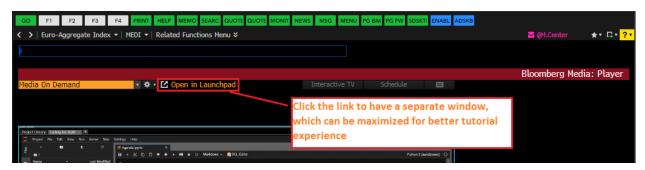
Along with the weekly self-study, there will be short webinars, which provide more examples, tips and tricks for Python and BQuant Platform. You will receive separate invitations for those webinars.

# **Download Materials and Import into BQNT**

https://github.com/yunkangian/LearnPythonWithBQNT

## **Video Tutorials**

For video tutorials, please copy the video links and run it on your Bloomberg terminal. If it doesn't play, please make sure you have Silverlight installed (check the link below). To have a better learning experience, please click the link Open in Launchpad and maximize the launchpad video window.



https://www.microsoft.com/silverlight/

Video for Week 1 – 3: {PLYR VOD 360532815 <GO>}

Video for Week 4: {PLYR VOD 360536854 <GO>}

## **Learning Path**

Week 1 - 1: Video #1 from 00:00:00 - 00:19:18

Variable and Data Types:

- Number
- String
- Print

Week 1 - 2: Video #1 from 00:19:18 - 00:34:30

Advanced DataTypes:

- List
- Dictionary

#### Week 1 - 3: Video #1 from 00:34:30 - 00:44:45

Boolean, Comparison and conditions

- Boolean
- Logic operators (and, or, not)
- Flow controls (if, elif, else)

## Week 2 - 1: Video #1 from 00:44:45 - 00:50:10

Loop: let computer do the repeating job

- For loop
- While loop

### Week 2 - 2: Video #1 from 00:52:25 - 01:02:28

Function: save the time and reuse our works

- Define and use function
- Comment and doc string
- Scope of the variable

#### Week 2 - 3: Video #1 from 01:02:28 - 01:05:20

Exceptions: handle potential errors

- Key concept: try... except
- Error types
- Raise our own errors

## Week 3 - 1: Video #1 from 01:05:20 - 01:09:15

Lambda: a must for Python for Data Analysis

- Lambda is just a simpler way to define a simple function
- Using lambda for sorting

#### Week 3 - 2: Video #1 from 01:09:15 - 01:16:12

Useful functions and a quick look of Python Class

- Useful functions for string
- Useful functions for dictionary
- Quick go through of Python Class

## Week 3 - 3: Video #1 from 01:16:12 - 01:22:27

Introduction to Python Modules/Packages

- Concept and import
- Good practice
- Must packages for data analysis

### Week 4 - 1: Video #2 from 00:31:16 - 00:38:25

Introduction to Pandas

- Key components of DataFrame
- Create DataFrame
- Read csv or excel file as DataFrame
- Useful functions of DataFrame

#### Week 4 - 2: Video #2 from 00:38:25 - 00:47:08

Continue Pandas I

- Get data from Bloomberg into DataFrame (Check the webinar link in the notebook)
- Select columns and rows
- Retrieve value from the DataFrame
- Filtering, sorting, grouping with the DataFrame

#### Week 4 - 3:

Continue Pandas II: use the example notebook Week 4 - 3

- Concatenate multiple DataFrames
- Simple column-based calculations and apply Lambda
- Chart the data with bqviz

# **Additional Resources:**

## **Pandas Cheat Sheet:**

 $\frac{\text{http://datacamp-community-prod.s3.amazonaws.com/dbed353d-2757-4617-8206-8767ab379ab3}{8767ab379ab3}$ 

# **Case Studies and Spotlight Webinars:**

Please run {BQNT SPOTLIGHT <GO>} on the terminal to access the latest up to date webinars