

# Python For Excel Workshop

Hosted by Felix Zumstein, author of *Python for Excel*

Tuesday, November 23<sup>rd</sup>, 12:30 – 1:30 PM

Zoom Meeting ID: 557 568 1609

LinkedIn and Instagram: @FQEBaruch



**FQE**

FINANCIAL QUANTS & ENGINEERS

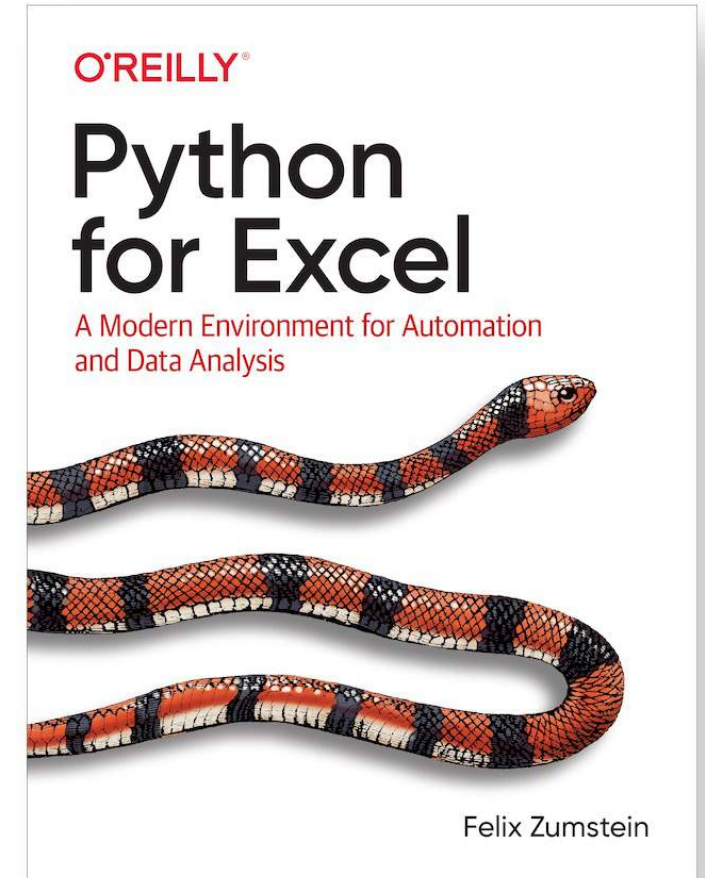
# Agenda

1. Introduction
2. Hands-on Workshop

# 1. Introduction

# About me

- Creator of xlwings: an open-source project that allows the automation of Excel with Python.
- Author of “Python for Excel” (O’Reilly, 2021).
- Co-Founder at xltrail.com: Version control for Excel workbooks.
- Previous life: Banker with a major in Economics



# Excel Feedback Forum

## How can we improve Excel for Windows (Desktop Application)?

[← Excel for Windows \(Desktop Application\)](#)

6,779

votes

Vote

### Python as an Excel scripting language

Let us do scripting with Python! Yay! Not only as an alternative to VBA, but also as an alternative to field functions (=SUM(A1:A2))



Daniel shared this idea

November 04, 2015

[Flag idea as inappropriate...](#)



ADMIN

ACCEPTING VOTES

· Excel Team [MSFT] (Product Owner, Office.com) responded

March 11, 2021

Thank you for the continued interest in this space. While we don't have specific plans to announce at this time, we have been researching the topic, conducting customer interviews, and are working with the Python team at Microsoft so we can build a plan that we think can address the scenarios you told us about and ensure it can run wherever Excel runs.

Keyur [Microsoft Excel]



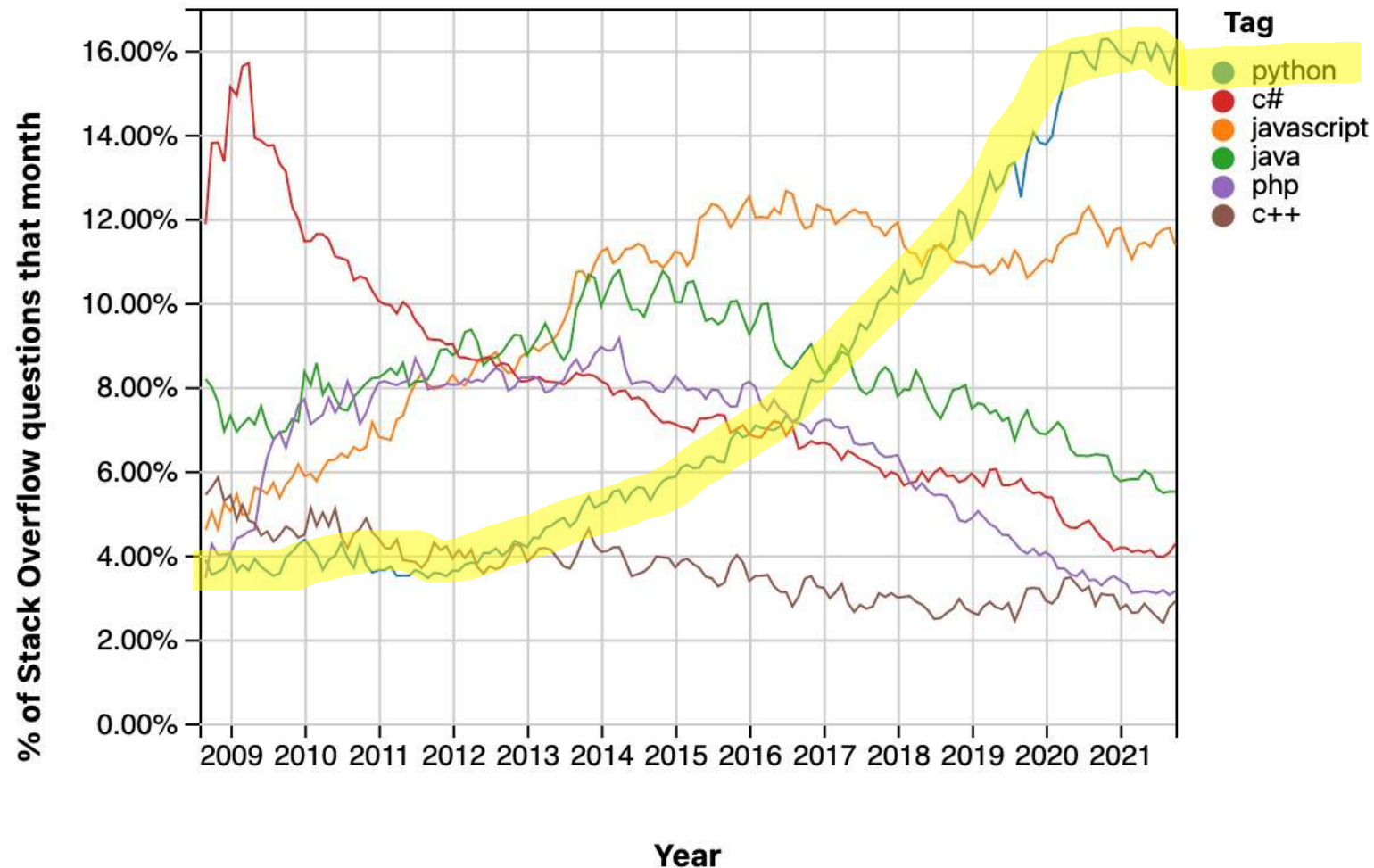
Source: <https://excel.uservoice.com/forums/304921-excel-for-windows-desktop-application/filters/top>

# Look familiar?

```
=IFERROR( @IF( $F1="yes",  
MMULT( --(J23:N23>0), --( 'HCW &  
Staff'!$BH$22:$BH$26) )*$C$113,  
MMULT( --(J23:N23), --( 'HCW &  
Staff'!$BF$22:$BF$26) )*$C$114), 0)+  
IF( 'Equipment List &  
Usage'!$F1="yes", $C$113,$C$114)*  
Total_Inpatients_in_beds_over_time*Q23
```

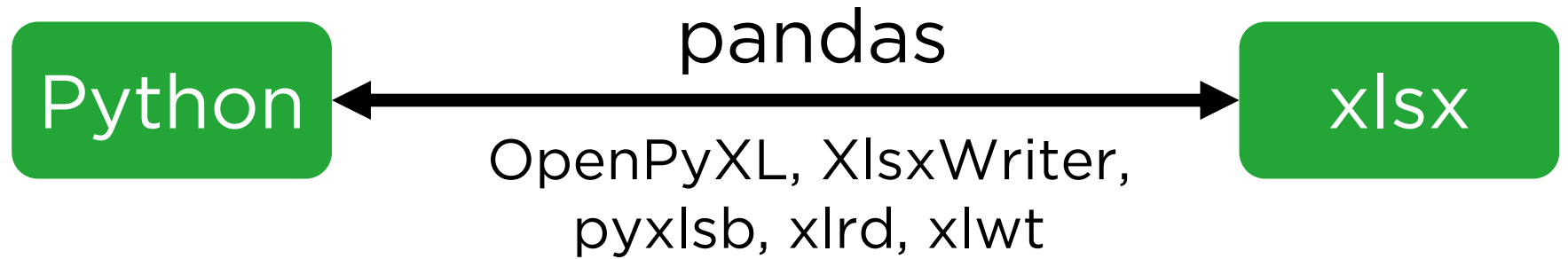


# “The Incredible Growth of Python”



# Two Types of Python Packages

Reading &  
Writing  
Files



Automating  
Excel



Source: Based on "Python for Excel" by Felix Zumstein (O'Reilly, 2021)



## 2. Workshop

# Workshop

- Material: [https://github.com/fzumstein/FQE\\_baruch\\_workshop](https://github.com/fzumstein/FQE_baruch_workshop)
- Introduction to Python and pandas
  - Jupyter notebook can be run in the cloud by clicking the “Binder” button
  - Reading and writing Excel files
  - Time Series analysis
- xlwings
  - Requires either Windows or macOS
    - with Excel installed
    - With Anaconda installed: <https://www.anaconda.com/products/individual>
  - Intro to concepts via Jupyter notebook
  - xlwings addin installation
  - xlwings quickstart
  - Building tools & user-defined functions



**Thank You**