Computational Finance in Python

Universität Tübingen

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XVESTOR.APP

Summer term 2022

Agenda

1) Introduction
2) Install Anaconda
3) Course overview

Introduction

- Why learn Python?
  - one of the easiest programming languages
  - widely used in data science and the field of numerical computations
  - growing global community of contributors; Python is open source
  - often used for cloud-based software services

Introduction

- Why learn computational finance?
  - information processing is one of the core tasks of financial services
  - high importance in front offices:
    - fast and rule-based processing of investment and trading decisions
  - high importance in middle and back offices:
    - automation of regulatory processes
    - audit-related projects

Introduction

- Goals of this course
  - quickly learn Python and programming concepts
  - solve real-world problems in Python
  - **implement your own trading strategy (assessment / demo)**

Dr. Thomas Schön

Education

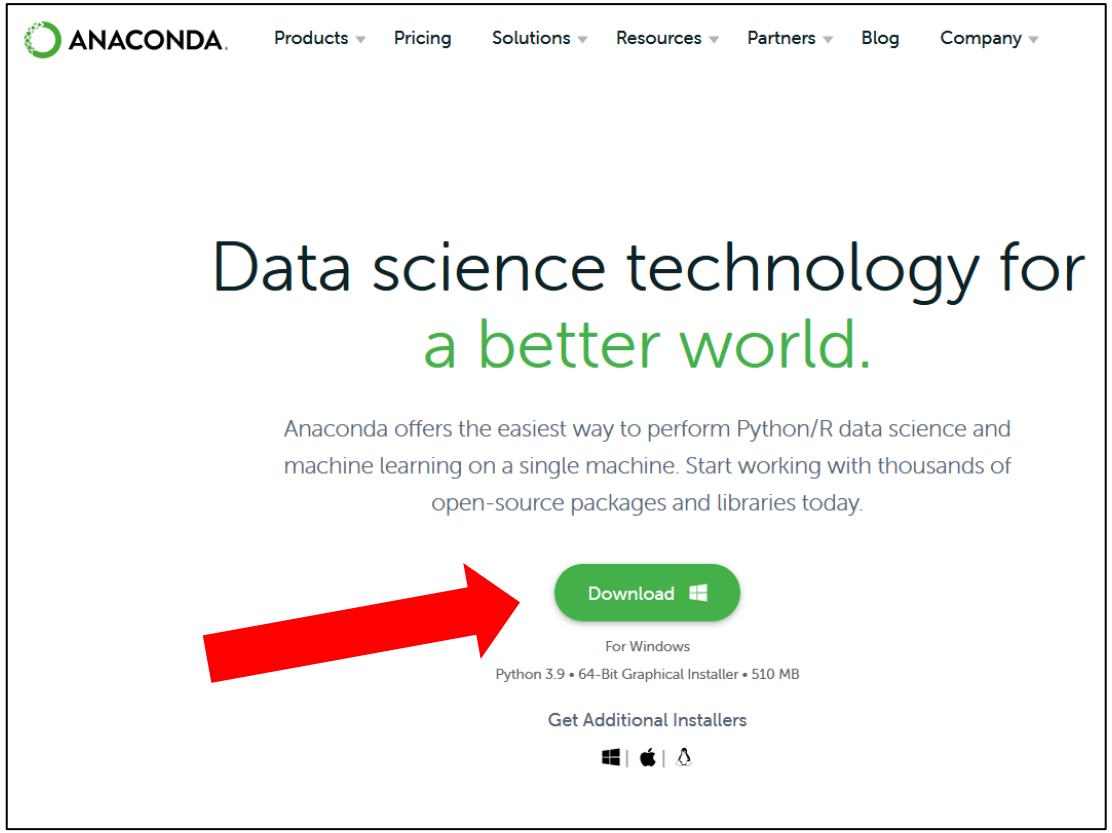
- PhD in Financial Engineering (Universität Tübingen)
- Diplom in Business Engineering (KIT)

14 years of experience

- Co-Founder of XVESTOR
- Allianz Global Investors
- Goldman Sachs

Install Anaconda

- go to https://www.anaconda.com/
- download and install Anaconda distribution on your computer



Course overview

Date	Description
22.04.2022	• Introduction • crash course Python, NumPy • exercises (for self-studies)
29.04.2022	• NumPy, Pandas • exercises (for self-studies)
06.05.2022	• Pandas, Matplotlib, • **presentation of assessment** • exercises (for self-studies)
13.05.2022	• time series, portfolio allocation, • exercises (for self-studies)
15.05.2022	• **registration for assessment**
19.06.2022	• **deadline for delivery of demo notebooks**
23.06.2022	• **presentation and assessment of demos**