

Python

Prof. Gheith Abandah

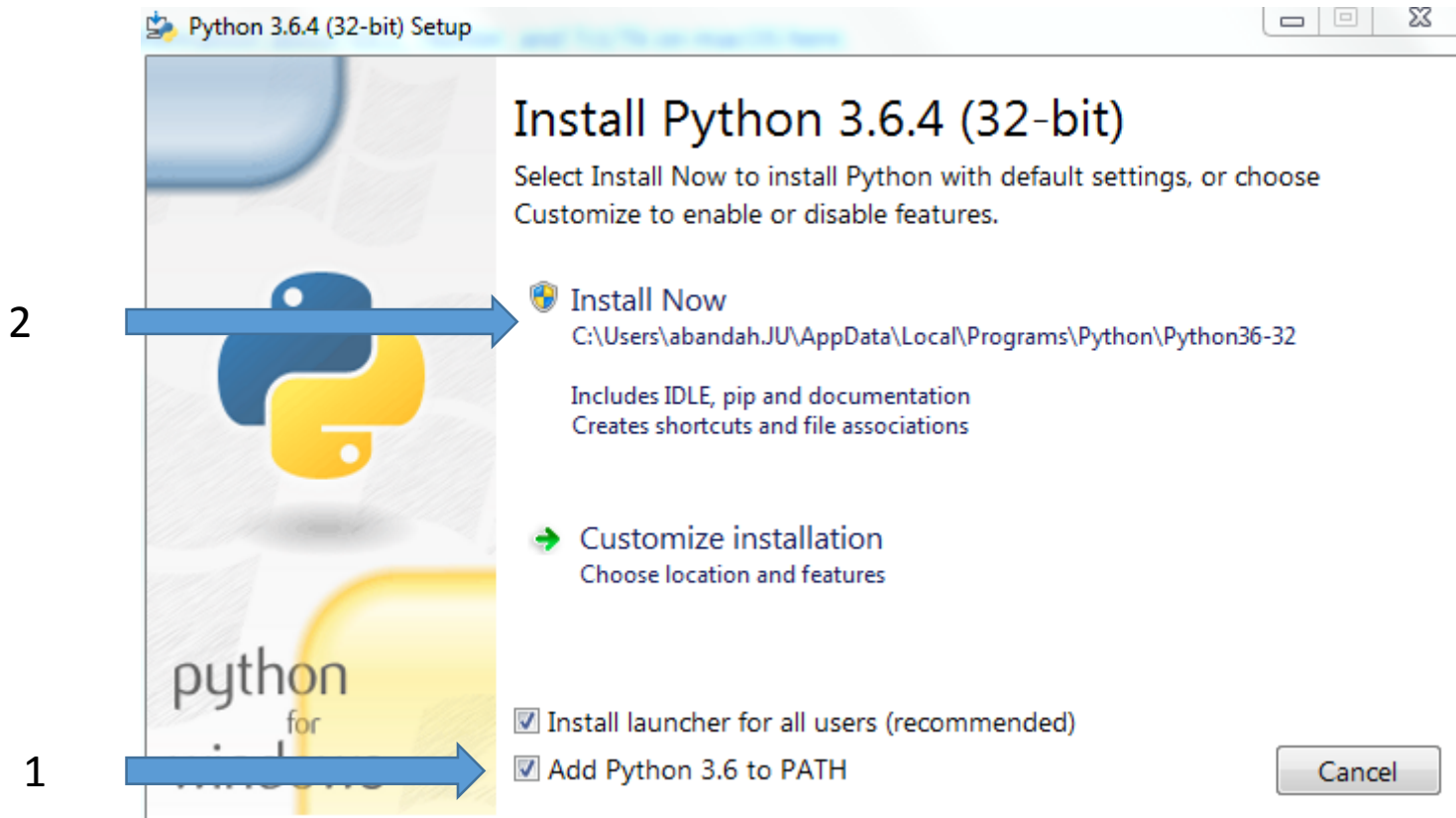
Outline

- First steps
- Introduction to Python
- PyCharm IDE
- Python books
- NumPy
- Pandas
- Matplotlib
- Jupyter notebooks

First steps

- Install Python 3.6.4 from www.python.org
<https://www.python.org/downloads/release/python-364/>
- For using TensorFlow, you need a 64-bit Python version.
<https://www.python.org/ftp/python/3.6.4/python-3.6.4-amd64.exe>
- Refer to the documentation on <https://docs.python.org>
- Study the tutorials on <https://www.learnpython.org/>

When installing Python, check the “Add to PATH” option



First steps

- From your OS command prompt, check the options of the package installing system by:

```
C:\>pip3 help
```

- Install needed packages through:

```
C:\>pip3 install --upgrade jupyter  
matplotlib numpy pandas scipy scikit-learn
```

Introduction to Python

<https://www.slideshare.net/nowells/introduction-to-python-5182313>

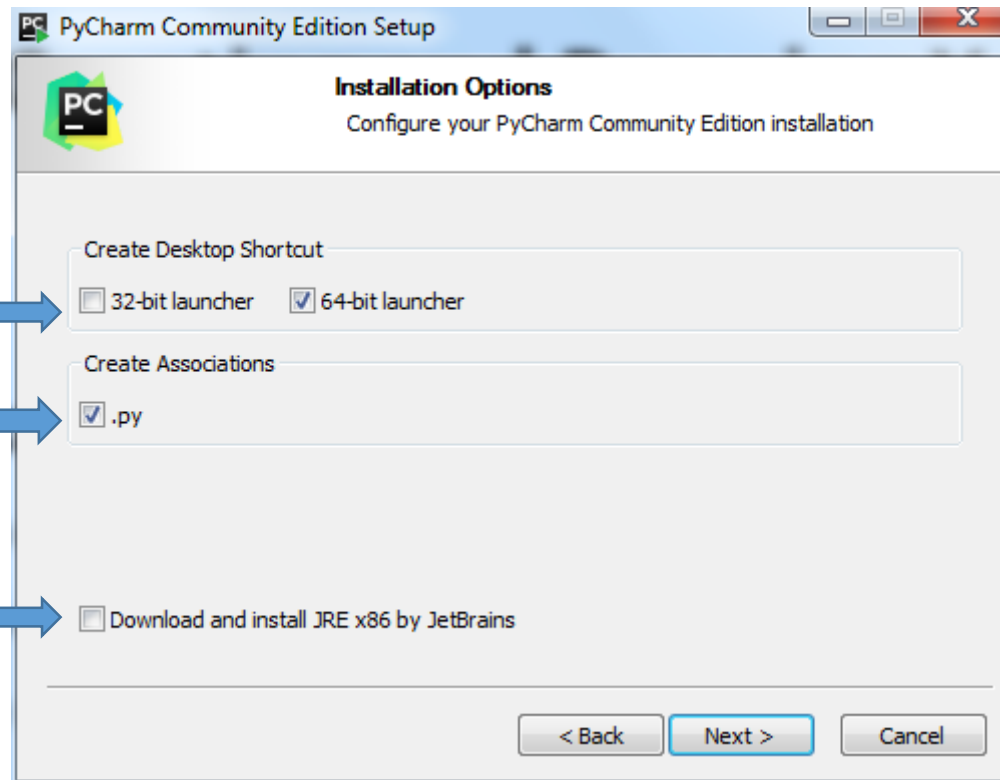
Outline

- ✓ First steps
- ✓ Introduction to Python
 - PyCharm IDE
 - Python books
 - NumPy
 - Pandas
 - Matplotlib
 - Jupyter notebooks

PyCharm

- Python comes with IDLE. This is a primitive IDE.
- **PyCharm** is a powerful Python IDE. Install it from <https://www.jetbrains.com/pycharm/>
- Install the free **Community** version, which is *Lightweight IDE for Python & Scientific development*.
- Read the first two steps of “First Steps” at <https://www.jetbrains.com/help/pycharm/first-steps.html>

PyCharm Installation



Select the relevant ones

Select this

No need to select

Python Books

1. **A Whirlwind Tour of Python**, by Jake VanderPlas,
<http://www.oreilly.com/programming/free/a-whirlwind-tour-of-python.csp> (**short**)
2. **Python for Everybody**, by Charles R. Severance,
<https://py4e.com/book.php> (**medium**)
3. **Fundamentals of Python Programming**, by Richard L. Halterman,
<http://python.cs.southern.edu/pythonbook/pythonbook.pdf> (**long**)