Python Workshop
Introduction for Engineers

Johann Lembach, Christopher Krämmer

November 15, 2018

Agenda

- Overview of Python
- Availability and Resources
- Examples and Live Demo
- Tasks

Agenda

- Overview of Python
- Availability and Resources
- Examples and Live Demo
- Tasks

Agenda

- Overview of Python
- Availability and Resources
- Examples and Live Demo
- Tasks

Agenda

- Overview of Python
- Availability and Resources
- Examples and Live Demo
- Tasks

Overview of Python

- Good beginner's language
- Interpreted scripting language
- Open Source $\rightarrow$ Free!
  - Wide range of packages / toolboxes
  - Large online community / support
- Prototyping of daily problems

Overview of Python

- Good beginner's language
- Interpreted scripting language
- Open Source $\rightarrow$ Free!
  - Wide range of packages / toolboxes
  - Large online community / support
- Prototyping of daily problems

Overview of Python

- Good beginner's language
- Interpreted scripting language
- Open Source $\rightarrow$ Free!
  - Wide range of packages / toolboxes
  - Large online community / support
- Prototyping of daily problems

Overview of Python

- Good beginner's language
- Interpreted scripting language
- Open Source $\rightarrow$ Free!
  - Wide range of packages / toolboxes
  - Large online community / support
- Prototyping of daily problems

Availability and Resources

- Python 3.x (and 2.x)
- Installation:
  - Linux: pre-installed, Anaconda
  - Microsoft: Anaconda
  - Mac: pre-installed, Anaconda
- IDEs:
  - Jupyter Notebook (good visualization)
  - PyCharm
  - Spyder (similar to Matlab)
  - text editor + command line

Availability and Resources

- Python 3.x (and 2.x)
- Installation:
  - Linux: pre-installed, Anaconda
  - Microsoft: Anaconda
  - Mac: pre-installed, Anaconda
- IDEs:
  - Jupyter Notebook (good visualization)
  - PyCharm
  - Spyder (similar to Matlab)
  - text editor + command line

Availability and Resources

- Python 3.x (and 2.x)
- Installation:
  - Linux: pre-installed, Anaconda
  - Microsoft: Anaconda
  - Mac: pre-installed, Anaconda
- IDEs:
  - Jupyter Notebook (good visualization)
  - PyCharm
  - Spyder (similar to Matlab)
  - text editor + command line

Follow along...

- Go to: **https://github.com/jole6826/IntroToPython**
- **Clone or Download** → **Download ZIP**
- **Extract** to Desktop or similar
- Start **Jupyter Notebook** (via **Anaconda Prompt**)
- Navigate to **IntroToPython/Notebooks** folder
- Start **FSR-Workshop-Intro.ipynb**

Live Demo