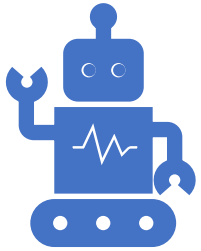

Python for Machine Learning I

Dr. Junya Michanan

Agenda

- Check IDE and Python Environments
- Library Installations
  - scipy
  - numpy
  - matplotlib
  - pandas
  - Sklearn
- Python Basic Review in W3School.com
- Python Foundation Test

Check the installations

```
# Check the versions of libraries

# Python version
import sys
print('Python: {}'.format(sys.version))
# scipy
import scipy
print('scipy: {}'.format(scipy.__version__))
# numpy
import numpy
print('numpy: {}'.format(numpy.__version__))
# matplotlib
import matplotlib
print('matplotlib: {}'.format(matplotlib.__version__))
# pandas
import pandas
print('pandas: {}'.format(pandas.__version__))
# scikit-learn
import sklearn
print('sklearn: {}'.format(sklearn.__version__))
```

Output

```
Python: 3.6.11 (default, Jun 29 2020, 13:22:26)
[GCC 4.2.1 Compatible Apple LLVM 9.1.0 (clang-902.0.39.2)]
scipy: 1.5.2
numpy: 1.19.1
matplotlib: 3.3.0
pandas: 1.1.0
sklearn: 0.23.2
```

Python Basic Review in W3School.com

https://www.w3schools.com/python/python_ml_getting_started.asp

- Python Data Structures
  - List
  - Tuple
  - Sets
  - Dictionary
  - Arrays
- File Handling
- Data Cleansing
- Numpy
- Scipy
- Pandas

Python Foundation Test

- Test I (5 points)
- Test II (5 points)
- Test III (5 points)
- Test IV (5 points)

To submit

1. File .py (separated file for each test assignment)
2. Capture screen image of your code and result