



UNIVERSITY OF  
PORTSMOUTH

# Python for Data Analysis

## Data Analysis Examples (Week 11)

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# What we will learn this week?

- ❑ Review what we learned in previous weeks
- ❑ Data analysis example
  - ❑ Well known dataset from a Kaggle competition
    - ❑ Titanic dataset

# Next Teaching Block (TB#2)

- ❑ Different Modeling Algorithms in Python
  - ❑ KNN
  - ❑ Decision Tree
  - ❑ Random Forest
  - ❑ Linear Regression
- ❑ Clustering in Python
- ❑ Model Evaluation in Python
- ❑ R Language for Data Analysis

# References & More Resources

## References:

- McKinney, Wes. *Python for data analysis: Data wrangling with Pandas, NumPy, and IPython*. O'Reilly Media, Inc., 2012.

## More Resources:

- Machine Learning with Python: Foundations:

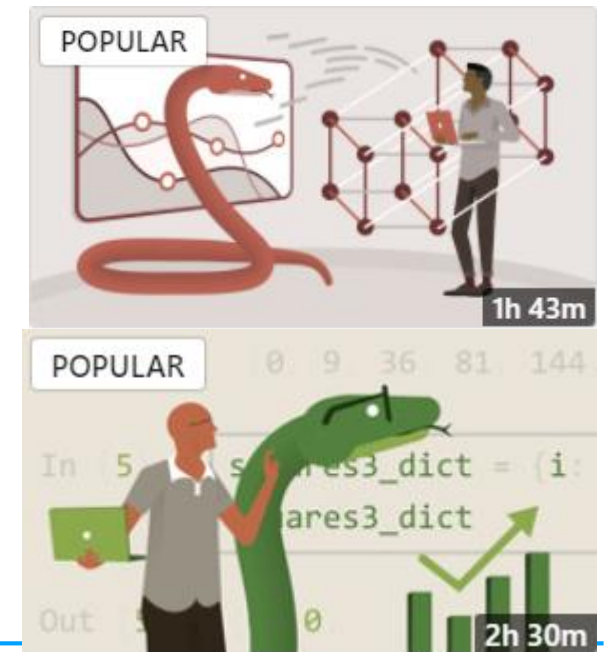
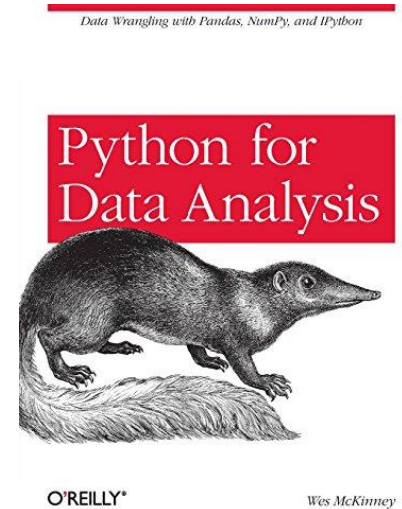
<https://www.linkedin.com/learning/machine-learning-with-python-foundations>

- Python Data Analysis on LinkedIn Learning:

<https://www.linkedin.com/learning/python-data-analysis-2>

- To use LinkedIn Learning, you can log in with your university account:

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# Practical Session

- ❑ Please download Week11\_CaseStudy\_Titanic.ipynb file, and run it to learn new points.
- ❑ Please read the practical sheet (Week10\_Practicals.pdf) and continue last week's exercise.