

Python for Data Science

N. Ceylan

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1 Introduction and Course Information

2 Week 1: Getting Started with Data Science

- ACQUIRE
- PREPARE
- ANALYZE
- REPORT
- ACT

Data preparation is very important to do.

Select technique , build model - evaluate - classification - regression - clustering - association - analysis - graph analysis

3 Week 2: (Optional) Background in Python and Unix

4 Week 3 - Jupyter Notebooks and Numpy

5 Week 4 - Pandas

6 Week 5 - Data Visualization

Course Week 5 - Data Visualization Engagement: Introduction to Data Visualization Video:
Types of Visualizations

- 7 Week 6 - Mini Project Week
- 8 Week 7 - Introduction to Machine Learning
- 9 Week 8 - Working with Text and Databases
- 10 Week 9 - Final Project Part 1
- 11 Week 10 - Final Project Part 2

References

- [1] A. C. Melissinos and J. Napolitano, *Experiments in Modern Physics*, (Academic Press, New York, 2003).