

ANALYSIS AND MACHINE LEARNING TECHNIQUES WITH BASICS
OF COMPUTER SCIENCE AND STATISTICAL LEARNING -
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Contents

- Introduction to Informatics

- What is a computer ?
- Networks and TCP/IP
- Digitalization and basics of data encryption

- Brief introduction to statistics

- Basic Concepts of Probability (The Language of Uncertainty)
- Descriptive Statistics (Summarizing Data) and Inferential Statistics (Making Conclusions)

- Brief introduction to programming languages and computer complexity

- Python
- Python data structures and more



Contents

- **Statistical Learning and Machine Learning**

- ML Introduction
- Unsupervised techniques
- Reinforcement Learning
- Supervised Techniques

- **Regression and Classification**

- **LR and PLS and Logistic Regression and RF and GPR**

- **Deep Learning**

- NN
- CNN

- **Interpretable ML**

- **PySR: Python library for symbolic regression**

