

Learning Python

Fundamentals of Artificial Intelligence

Instructor: Chenhui Chu

Email: chu@i.kyoto-u.ac.jp

Teaching Assistant: Youyuan Lin

E-mail: youyuan@nlp.ist.i.kyoto-u.ac.jp

Schedule

- 1. Overview of AI and this Course (4/14)
- 2. Introduction to Python (4/21)
- 3, 4. Mathematics Concepts I, II (4/28, 5/12)
- 5, 6. Regression I, II (5/19, 5/26)
- 7. Classification (6/2)
- 8. Introduction to Neural Networks (6/9)
- 9. Neural Networks Architecture and Backpropagation (6/16)
- 10. Fully Connected Layers (6/23)
- 11, 12, 13. Computer Vision I, II, III (6/30, 7/7, 7/14)
- 14. Natural Language Processing (7/17)

Overview of This Course

11, 12, 13. Computer Vision
I, II, III

14. Natural language
processing

Deep Learning Applications



8. Neural network
Introduction

9. Architecture and
Backpropagation

10. Feedforward
neural networks

Deep Learning



5. Simple linear
regression

6. Multiple linear
regression

7. Classification

Basic Supervised Machine Learning



2. Python

3, 4. Mathematics Concepts I, II

Fundamental of Machine Learning

Executing a Notebook

- We will use Google Colab
- Access the notebook in Google Colab
 - <https://shorturl.at/v9Zyu>
 - Copy the notebook to your own Google drive and then run

Additional Resources

- Python official tutorial:
 - <https://docs.python.org/3/tutorial/>
- Another Tutorial:
 - <https://www.w3schools.com/python/>
- Or just enter “learning python” in your favorite search engine to find many resources....

Report

- The task will be explained in the notebook
- Submit both the codes and figures **in pdf** via PandA
 - Submission due: **next lecture**
 - Name the pdf file as **student id_name**.