

Extra Reading material

Official Website:

1. Julia Official website: [Link](#)
2. Anaconda Official website: [Link](#)
3. Jupyter Notebook Official website: [Link](#)
4. Scikit-learn Official website(Python): [Link](#)
5. Scikit-learn.jl Official website: [Link](#)
6. Plots.jl Official website: [Link](#)

Self-Learning Material:

General Computation Concept

1. Binary Overflow [English] (Video): [Link](#)

This video introduced the concept of overflow error with concrete examples.

2. Six-Step Problem-Solving Process [English]: [Link](#)

This article introduced the 6 step problem-solving process with details definition and explanation

3. Logical Vs. Arithmetic Shift [English]: [Link](#)

This is the tutorial from Open4tech and explained the difference between Logical Shift and Arithmetic Shift with examples.

4. What is an Algorithm? [English] (Video): [Link](#)

This video is about the general concept in algorithms. Algorithms not just appear on the computer but also our daily life.

5. Understanding ASCII and Unicode (GCSE) [English] (Video): [Link](#)

A short tutorial which explains what ASCII and Unicode are, how they work, and what the difference is between them.

6. DSE ICT Notes Binary, 2's complement and Encoding [Chinese] [Link](#)

The subject notes on Binary, 2's complement and Encoding for DSE ICT by Mr. Wong Ting Keung, Simon(who is a ICT teacher)

7. DSE ICT - problem solving process [Chinese] (Video):

[Link\(Part 1\)](#), [Link\(Part 2\)](#), [Link\(Part 3\)](#)

A tutorial on 6 step problem-solving process with details definition and explanation in Cantonese.

Programming Concept & Julia Programming

1. TutorialKart - Tutorial on Julia [English]: [Link](#)

Tutorial provided by TutorialKart. We covered most of the content of this tutorial and it is for your reference

2. JuliaAcademy [English]: [Link](#)

Self-Learning video prepared by core Julia developers

3. A Comprehensive Tutorial to Learn Data Science with Julia from Scratch [English]: [Link](#)

A Tutorial focusing on learning data science with Julia. There are more libraries in Julia for data science introduced in this tutorial.

4. The Julia Express [English]: [Link](#)

This tutorial introduced more about julia programming data handling with examples,

5. Julia Programming Tutorial on Youtube [English] (Video) [Link](#)

Video tutorial by codebasics on Youtube. We covered most of the content of this playlist and it is for your reference

6. Intro to Julia for data science [English] (Video) [Link](#)

Video tutorial on data processing, algorithms, and visualizations in Julia

Reference:

1. Online Calculator for Two's Binary conversation: [Link](#)
2. ASCII Table: [Link](#)
3. Bitwise operation - Wikipedia [Link](#)
4. Julia wikibook: [Link](#)

Advanced Material:

Topics in the following material may not be covered by this course:

1. Julia 1.3 Documentation [English]: [Link](#)

Full documentation from official Julia website

2. ThinkJulia [English]: [Link](#)

Tutorial prepared by Allen Downey and Ben Lauwens and covered more advanced topics with jupyter notebooks examples. It could be considered as a one-semester course.

3. Online course - CS50's Introduction to Computer Science by Harvard University [English] : [Link](#)

An introduction to the intellectual enterprises of computer science and the art of programming by Harvard University. Suggest for interesting in computer science

4. Online course - Julia Scientific Programming [English]: [Link](#)
An online course for scientific programming in Julia with the SIR model as example.