

Introduction to Computer Science

Fall 2022

#0

Chi-Jen Wu

Agenda

- About Me Chi-Jen Wu (吳齊人, CJ)
- Syllabus
 - General Information
 - Objectives
 - Topics
- Conclusion
- Q&A
- <https://cjwu.github.io/courses/cs10152022.html>
- cjwu@mail.cgu.edu.tw





About Chi-Jen Wu (CJ)

- Assistant professor@CGU, Feb 2021
- EECS Ph.D., NTU 2012
- Academia Sinica Postdoc Scholar
 - 2012-2013
- 7 years startup experience
 - 2013-2020
 - CEO/CTO (創辦人、老闆)
 - Director of Board



National
Taiwan
University

Question about startup?



General Information

- Time
 - Wed 15:10 - 16:00 and Thu 15:10 - 17:00
- Course Assistants
 - 李彥廷(大四) 張睿(大四) 鍾佩宸(碩一) 吳胤恩(碩二)
 - Slack 聯繫
- Classroom:
 - 電腦教室(二) & Google Meet
 - <https://csiecggu.slack.com>
 - cs101-2022
- Office Hour:
 - Slack
- TA time (on demand)
 - Wed 16:10 - 17:00





Search for TA

csie.cgu

Threads

Direct mess

Mentions &

Slack Conn

More

Channels

2022大數據

alphalab

專題2021-林

cs101-2022

Search @cs2022

Clear

@cs2022 — Search messages, files, and more

@cs2022 in:cs101-2022

@cs2022助教-張睿

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View profile for cs2022助教-張睿

cs2022助教-鍾佩宸 o cs2022助教-鍾佩宸

Not the results you expected? [Give feedback](#) or [learn more](#)

Yesterday

Slack

QR code



slido



Objectives

Q1: Computer is ?

- This is an introductory **computer science** course for CS undergraduate students
- The students will get a big picture of computer science
- Students will also gain the ability to solve problems with **C/C++** using modern development tools
 - Cloud Platform and Cloud Shell Editor
 - Git repository
 - GitHub

Q2: C/C++ is ?



Topics

- The Shapes of Computers Today
- Computer Organization
- Operating system
- Networking & The Internet
- Database Systems
- Computer Security
- Cloud Platform/Cloud Shell Editor (gcc/g++/Makefile)
- Cloud Platform/Cloud Source Repositories (git)
- C/C++ Programming

5W1H:

WHAT

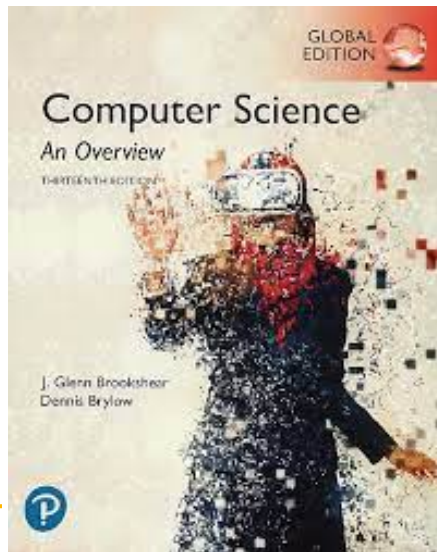
WHY

HOW

WHERE&WHEN&WHO

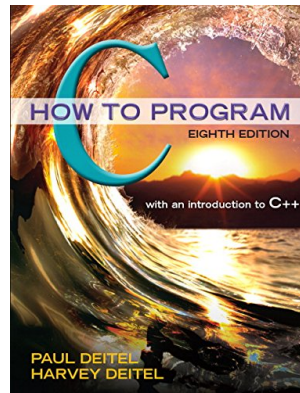
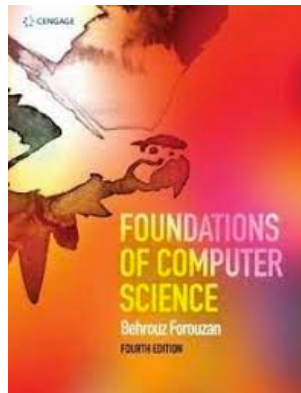
Textbook

- J. Glenn Brookshear, **Computer Science: An Overview** 13/e
- Walter Savitch, "**Absolute C++**, Global Edition" Sixth Edition



References

- Behrouz A. Forouzan, "**Foundations of Computer Science**," 4/e, 2018
- Deitel & Deitel, **C How to Program** 8th Ed., Prentice Hall
- Google
- Stack overflow

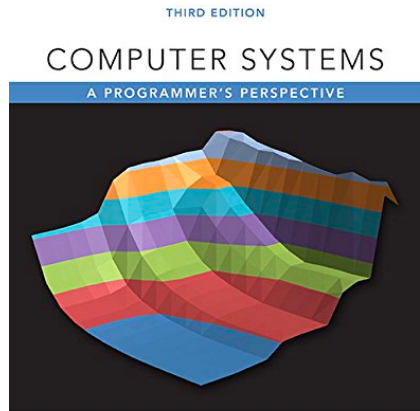


References

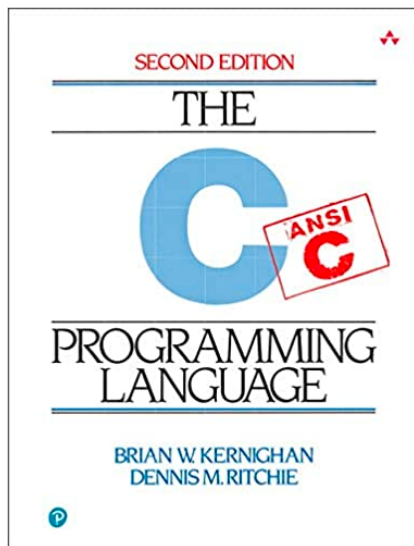
進階，想飛天！



- Randal E. Bryant and David R. O'Hallaron, **Computer Systems: A Programmer's Perspective**, 3/E (CS:APP3e)
- Brian W. Kernighan, Dennis M. Ritchie, **The C Programming Language**, 2/e



BRYANT • O'HALLARON



Grading

- 25% Mid-term exam
- 30% Homework / Exercises
- 25% Final exam
- 20% Participation/Quizzes

Q3: ok for you ?



About HW & Lab

教學進度 Course Progress Outline

總授課時數 (Total Hours) : 54 小時 (Hours)

項次 No.	時數 Hours	教學進度 Outline	作業和實驗 Homework&Lab
1	3	Course Overview & An Introduction to Computer Science	HW#0 問卷調查 同學資訊能力問卷填寫
2	3	The Shapes of Computers Today & Computer Organization Computer DIY	LAB#1 PC DIY
3	3	Number Systems & Data Storage	HW#1 作業練習
4	3	Operating system	LAB#2 虛擬機
5	3	Computer Network	LAB#3 ubuntu
6	3	The Internet & WWW	LAB#4 ubuntu
7	3	Database Systems	HW#2 作業練習
8	3	Computer Security	LAB#5 ubuntu
9	3	Mid-term Exam	
10	3	An Introduction to Programming Concepts	
11	3	Cloud Editor/Cloud Source Repositories/git/github	LAB#6 git/github 練習 Git cmd and GitHub push
12	3	C/C++ Basics	HW#3 C語言練習 程式作業 & github push
13	3	Variables, Expressions, and Assignment Statements	HW#4 C語言練習 程式作業 & github push
14	3	Flow of Control: Boolean Expression	HW#5 C語言練習 程式作業 & github push
15	3	Flow of Control: Loops	HW#6 C語言練習 程式作業 & github push
16	3	Function Basics	HW#7 C語言練習 程式作業 & github push
17	3	Programming with Arrays	HW#8 C語言練習 程式作業 & github push
18	3	Final Exam	手寫程式





About Mid-term exam

手寫考券



About final exam

手寫考券

About Programming Homework & Quizzes

- By git
- Commit to **github**, only
- Start using git, please



練習#0

0. 了解一下什麼是 git/github

1. 申請github帳號

2. Git 安裝 & try it

3. Commit a readme

4. 有問題請私訊助教



<https://github.com/>



<https://blog.techbridge.cc/2018/01/17/learning-programming-and-coding-with-python-git-and-github-tutorial/>



填寫問卷表單

[https://docs.google.com/forms/d/e/
1FAIpQLScTwCwhkbR-
ycp1He9stU744skNyx0u7ITCD5QXJO0A3ufmQg/
viewform](https://docs.google.com/forms/d/e/1FAIpQLScTwCwhkbR-ycp1He9stU744skNyx0u7ITCD5QXJO0A3ufmQg/viewform)

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Conclusion

- Make things and have fun
- Slack 私訊我或是助教





Thanks!

Open for any questions

Q4: Any questions ?

CJ Wu

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