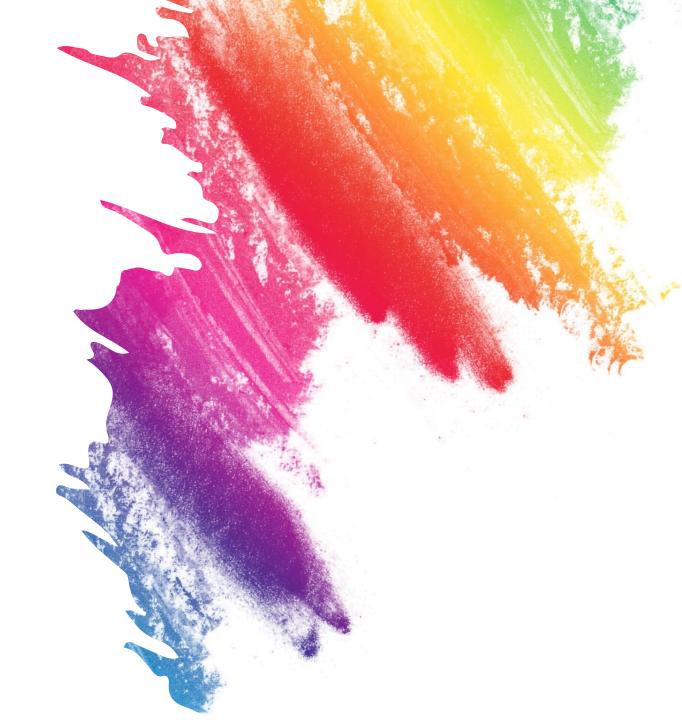
**Digital Image Processing** 

## Announcements

Spring 2023



#### Class Information

- 13:20 ~ 16:10, Wednesday @102
- Class website
  - NTU COOL: <a href="https://cool.ntu.edu.tw/courses/26661">https://cool.ntu.edu.tw/courses/26661</a>
  - Lecture #1
  - Student Information Form (Mail to TA by Feb. 23)

#### Teaching Assistant

• 許喬茵 & 侯宥任 @532

Office Hours: 12:00 ~ 14:00, Tuesday

13:00 ~ 15:00, Thursday

• Email: dip.mslee@gmail.com

#### Textbook:

• William K. Pratt: Digital Image Processing, 3rd Edition, John Wiley & Sons Inc., 2001.

#### Reference Books:

- D. E. Dudgeon and R. M. Mersereau: Multidimensional Digital Signal Processing, Prentice Hall, 1984.
- Anil K. Jain: Fundamentals of Digital Image Processing, Prentice Hall, 1989.
- J. S. Lim: Two-Dimensional Signal and Image Processing, Prentice Hall, 1990.
- Rafael C. Gonzalez and Richard E. Woods: Digital Image Processing, Prentice Hall, 2010.
- Ronald N. Bracewell: Two-Dimensional Imaging, Prentice Hall, 1995.
- Kenneth R. Castleman: Digital Image Processing, Prentice Hall, 1996.

#### Homework Related

- There will be 5~6 assignments
- NTU COOL and Gradescope (Entry Code: 8NWB4J)
- All assignments require programming
- Due at 11:59 pm (midnight) on the due date
- Note
  - may discuss but no duplicating
  - TA's NOT responsible for debugging
  - No late homework will be accepted. Plagiarism is strictly prohibited

#### Grading Policy

• Homework: 40%

• Midterm Exam: 30%

• Term Project: 30%

#### Tentative Schedule

- Introduction and Digital Image Fundamentals
- Image Enhancement in Spatial Domain
- Edge Detection
- Geometrical Modification
- Morphological Processing
- Digital Halftoning and Inverse Halftoning
- Texture Analysis
- Document Processing
- Image Sampling and Transforms
- Image Enhancement in Frequency Domain
- Color Image Processing
- Image Compression

#### Tentative Schedule

Date	Content	Date	Content
02/22	Lecture 1	04/19	Lecture 7
03/01	Lecture 2	04/26	Proposal
03/08	Lecture 3	05/03	Lecture 8
03/15	Lecture 4	05/10	Lecture 9
03/22	Lecture 5	05/17	Lecture 10
03/29	Lecture 6	05/24	Demo
04/05	Spring Break	05/31	Demo
04/12	Midterm	06/07	Final Package Due

#### Others

- 加簽
  - 網媒所博士班同學優先, 其餘的再進行抽籤決定
  - 請有修課意願的同學掃右方QR code填寫表單
  - 登記截止時間為 2/22 16:10



- 旁聽
  - 本課程一律不開放旁聽
  - NTU COOL也不會增設旁聽帳號給同學

- Student Information Form (Due on )
  - Name, Student ID and Department
  - Email address
  - Your portraits including a sketch and a photo, both 512 x 512
  - Why do you want to take this course? What do you expect to learn?
  - What do you want to do in the Final Project?
- Students who registered already
   Submit to NTU COOL
- Students who has not registered

Email TA: <a href="mailto:dip.mslee@gmail.com">dip.mslee@gmail.com</a>
[DIP] Student xxxxxx