HA NOI UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

Computer Vision

Chapter 0: General information

About me

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- Office:
  - 706 - B1 (working office) / 1002-B1
- Teaching:
  - Computer vision, image processing
  - Databases, database labs
  - Intro to DS, Intro to ICT
- Research:
  - Semantic segmentation (on medical images)
  - Domain adaptation for semantic segmentation
  - Action recognition (with multi-view, multi-modality
  - Image representation and retrieaval

General information

- Course name:

COMPUTER VISION

- Code: IT5409 / IT4343E
- Credit: 3(3-1-0-6)
  - Lecturer: 45 hours
  - Capstone project: 15 hours
  - Experiments: 0 hours

Evaluation

- Mid-term (0.4)
  - Capstone project evaluation
    - Program
    - Report
    - Presentation
  - Bonus
- Final term: (0.6)
  - Multi-choice questions
  - Short/long answer questions

Rules

- In-class attendance
- Telephone:
  - turn-off or in vibration mode
- Come in/ go out if necessary
  - No need for asking permission
  - Without noise

Course Content

- **Chapter 1.** Introduction
- **Chapter 2.** Image formation, acquisition and digitization
- **Chapter 3.** Image Processing
- **Chapter 4.** Feature detection and matching
- **Chapter 5.** Segmentation
- **Chapter 6.** Motion object detection and tracking
- **Chapter 7**. Object recognition and deep learning

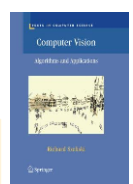
How to learn?

- Class attendance
- Reading additional articles / books
- Practice your-self (OpenCV, ...)
- QA

- Communication channel:
  - MS Teams (see class code on qldt.hust.edu.vn)

Reference books

- [1]. Richard Szeliski (2011). Computer Vision: Algorithms and Applications. Springer. http://szeliski.org/Book/
- [2]. David A. Forsyth, Jean Ponce (2011). Computer Vision: A modern Approach. Pearson
- [3]. Ranjay Krishna, Ed and Compiler “Computer Vision: Foundations and Application”, Stanford University, First printing, December 2017.

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