ĐẠI HỌC ĐÀ NẴNG
TRƯỜNG ĐẠI HỌC CÔNG NGHỆ THÔNG TIN VÀ TRUYỀN THÔNG VIỆT - HÀN
VIETNAM - KOREA UNIVERSITY OF INFORMATION AND COMMUNICATION TECHNOLOGY
한-베정보통신기술대학교

Nhân bản – Phụng sự – Khai phóng

Introduction to Computer Vision course

Computer Vision

Course Description

1. Overview of Computer Vision
2. Image Enhancement & Restoration
3. Image Segmentation
4. Feature Detection & Description
5. Image Classification
6. Convolutional Neural Network
7. Deep Learning Models for CV
8. Motion Estimation

No of credits: 3

Lectures: 2

Practice: 1

Prerequisites

- Good programming skills in Python/C++
- Linear Algebra
- Probability Theory
- Artificial Intelligence, Machine Learning
- Digital Image processing

References

[1]. Richard Szeliski, **Computer Vision: Algorithms and Applications**, Springer, 2022

[2]. Adrian Rosebrock, **Deep Learning for Computer Vision with Python** (Starter/Practitione/ImageNet Bundle), PyImageSearch, 2017

[3]. Rafael C. Gonzalez & Richard E.Woods, **Digital Image Processing,** 4th Edition, Pearson Education, 2018

[4]. Aurelien Geron, **Hands-on Machine Learning with Scikit-Learn, Keras & TensorFlow,** O'reilly, 2019

[5]. **Teaching & learning slides**

Grading

- **On-going assessments:**
  - Diligence (D - attendance): **10%**
  - Labs (L - personal programming practice): **20%**
  - Middle Exam (ME - written exam): **20%**
- **Final Exam** (FE- presentation based on project): **50%**
- **Total score =** **0.1***D + **0.2***L + **0.2***ME + **0.5***FE

Enjoy the Course…!