

101-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	影像辨識技術	Serial No. / ID	1958 / EDR5199
Dept.	電機工程學系博士班	School System / Class	研究所博士班1年1班
Lecturer	黃登淵	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(二)567 / H371	Language	English

Introduction
<p>This course is supported by the Ministry of Education in Taiwan, which is one of the programs of "Training curriculum of IT software for developing the intelligent sensing and recognition of images - Image recognition technology (Course 1)". The curriculum aims to make students understand the statuses of development and application in image sensing and recognition technology, and further to train the students with the capacity of image system design. The curriculum is planned into three levels, such as the basic topics, the advanced topics, and the special topics. The basic topics focus on introducing fundamental image processing, the advanced topics presents the methods of feature extraction of images and the classifiers commonly used. The special topics give some practical applications for different image recognition technologies. This course will proceed both in oral presentation and in program implementation in the appropriate section to enhance students' interest and to improve the learning performance.</p>

Outline
<p>Part I. Basic topics Chapter 1. Introduction to image sensing and image recognition Chapter 2. Image filter design and implementation Chapter 3. Color image processing Chapter 4. Morphological image processing Chapter 5. Image segmentation Part II. Advanced topics Chapter 6. Feature</p>

extractionsChapter 7. Feature selectionsChapter 8. Motion detectionChapter 9. Classifier design and implementationPart III. Special topics (some topics are optional)Chapter 10. Face detectionChapter 11. Face recognitionChapter 12. Identity recognition by gaitChapter 13. Hand gesture recognitionChapter 14. Indoor surveillance system

Prerequisite

none.