Current subjects in Computer Science II

Computer Vision and Pattern Recognition

- **Lecturers:**
  - Computer Vision: Arturo Gil
  - Pattern Recognition: Luis Payá

- **Main purpose: Offer you a general view of Computer Vision and Pattern Recognition**

UNIVERSIDAD MIGUEL HERNÁNDEZ DE ELCHE

- Wir kommen aus Elche...

ELCHE

- A nice place with a lot of history….
  - First people living around 2000 B.C.
  - V century B.C. → Iberians called it *Heliké*

  - 209 B.C → Romans called it *Colonia Iulia Ilice Augusta*

  - III century A.D. → Barbarians, Celts and Visigoths
  - Between the VIII and IX century A.D. → Muslim invasion
  - 1265 A.D. → Cristians conquer the city
  - Around the XIX → Starts shoe industry

ELCHE

Course description

Computer Vision:

1.- Introduction. Applications

2.- Capturing images.

3.- Image features. Image transformations.

4.- Edge extraction. Significant point extraction

5.- Segmentation

6.- Introduction to 3D vision

7.- Practice I and II (Matlab)

Pattern recognition:

1. Introduction.

2. Bayesian decision theory.

3. Feature Extraction and Selection Methods

4. Example of pattern recognition system: Face recognition

Evaluation

- Test + results of practices at the end of the whole course.
  - Total mark =
    - 50% practice reports
    - 50% multiple-choice test and short questions

Current Subjects in CS

PART ONE: COMPUTER VISION
Unit 1: Wednesday 13th 09:45-11:15 (Arturo Gil) (lecture).
Unit 2: Wednesday 13th 11:30-13:00 (Arturo Gil) (lecture).
Unit 3: Wednesday 13th 15:45-17:15 (Arturo Gil) (practice).
Unit 4: Thursday 14th 09:45-11:15 (Arturo Gil) (lecture).
Unit 5: Thursday 14th 11:30-13:00 (Arturo Gil) (lecture).
Unit 6: Thursday 14th 15:45-17:15 (Arturo Gil) (practice).

PART TWO: PATTERN RECOGNITION
Unit 7: Friday 15th 8:00-9:30 (Luis Payá) (lecture).
Unit 8: Friday 15th 9:45-11:15 (Luis Payá) (lecture).
Unit 8: Friday 15th 11:30-13:00 (Luis Payá) (practice).
Unit 8: Friday 15th 14:00-15:30 (Luis Payá) (practice).
Unit 8: Friday 15th 15:45-17:15 (Luis Payá) (practice).

EVALUATION (test + results of practices) - Test: Monday 18th 9:45-11:15