UNIVERSITÀ DI PAVIA

Anno Accademico 2021/2022

COMPUTER VISION

Enrollment year	2020/2021
Academic year	2021/2022
Regulations	DM270
Academic discipline	ING-INF/05 (DATA PROCESSING SYSTEMS)
Department	DEPARTMENT OF ELECTRICAL,COMPUTER AND BIOMEDICAL ENGINEERING
Course	COMPUTER ENGINEERING
Curriculum	Embedded and Control Systems
Year of study	2°
Period	1st semester (27/09/2021 - 21/01/2022)
ECTS	6
Lesson hours	60 lesson hours
Language	English
Activity type	WRITTEN AND ORAL TEST
Teacher	LOMBARDI LUCA (titolare) - 5 ECTS ALDEA EMANUEL - 1 ECTS
Prerequisites	Basic knowledfe of computer science
Learning outcomes	The student will be able to consider broblems related to artificial vision. In particula probles related feature analisys and pattern recognition.
Course contents	Basic definitions. Low-level image analysis methods, including image formation, edge detection, feature detection, and image segmentation. 3D Vision and motion analysis Object recognition Recognition Processes. Direct Comparison. Alignment methods. Invariant properties methods. Parts decompositions method. Hough transform. Mathematical morphology

Teaching methods

Lectures conducted using presentations projected on screen (available to students) and insights using the chalkboard.

Reccomended or required readings

Slides of the lessons.

3C Vision: Cues, Context and Channels,Virginio Cantoni, Stefano Levialdi, Bertrand Zavidovique, Elsevier2011

Assessment methods

An oralexamination and the discussionof a projectrelatedto a topicof the course

Further information

Sustainable development goals - Agenda 2030	$lbl_legenda_sviluppo_sostenibile