

Week1: Presentation

Edge Computing

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Outline

1 Subject

2 Organization



Subject Intro

- Edge Computing subject will be organized as follows
 - Video lectures covering the theory aspects
 - Lab assignments that must be completed in a group of student
 - All information will be made available to the students at the [web site](#)
 - Lab assignments will be sent by email to the professor
 - Grading:
 - Lab assignments in groups (30%)
 - Presentation of AI-hardware for inference in groups (20%)
 - Personal Quizzes (30%)
 - Final project (20%)
- Professor
 - Carlos García (garsanca@ucm.es)
 - Luis Piñuel (lpinuel@ucm.es)



General Organization

- Two main parts:

Artificial Intelligence hardware for Inference Introduction

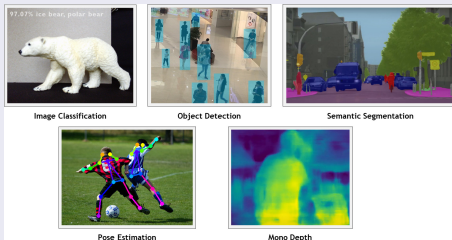
- Introduction to Hw for inference
 - Adaptation and quantization phases (Luis Piñuel)



General Organization

Jetson-Nano

- Deploy Deep Learning Models in a Developer Kit Jetson-Nano (Carlos García)



Schedule

- Week 1: Introduction to Edge-Computing
 - Thursday: Intro Inference Hw (Luis Piñuel)
- Week 2: Setup Jetson-Nano
 - Thursday: Inference Hw (Luis Piñuel)
- Week 3: Image processing with OpenCV
 - Thursday: Expositions of Hw inference (video-presentation)
- Week 4: Inference Image Classifying
 - IoT system for mask classification



Schedule

- Week 5: Object Detection
 - Capacity control in shopping center
- Week 6: Image Segmentation
 - Autonomous Driving
- Week 7: Pose classification
 - Driving Control System for attention and avoid falling asleep

