

## Face Recognition and Artificial Vision Group

Department of Computer Architecture and Technology,  
Computer Science and Artificial Intelligence. High Technical  
School of Computer Engineering.

## Research



Face Recognition



Computer Vision for Traffic and Road Safety



Computer Vision for Airport Security



Biometrics and Computer Vision Laboratory



Universidad  
Rey Juan Carlos



## Computer Vision for Traffic and Road Safety



CABINTEC: Intelligent Cabin for Road Transportation.



Automatic Classification and Sequential Analysis of Pedestrian-Vehicle Conflicts



Research of traffic lights intersections regulated by computer vision



Analysis of the Spanish presence in Vehicle Safety Forums



Catalogue of Education Activities for Road Safety Technicians



PQN: Pedestrians' Quality Needs



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- This project aims to design the cockpit of a vehicle equipped with **intelligent technologies** able to detect the **driver's behaviour** (healthy habits vs. dangerous conducts in the context of a safe driving), as well as the study of the parameters describing the vehicle and the driver in the **previous instans of an accident**.

CABINTEC:

Intelligent Cabin for Road Transportation





## CABINTEC:

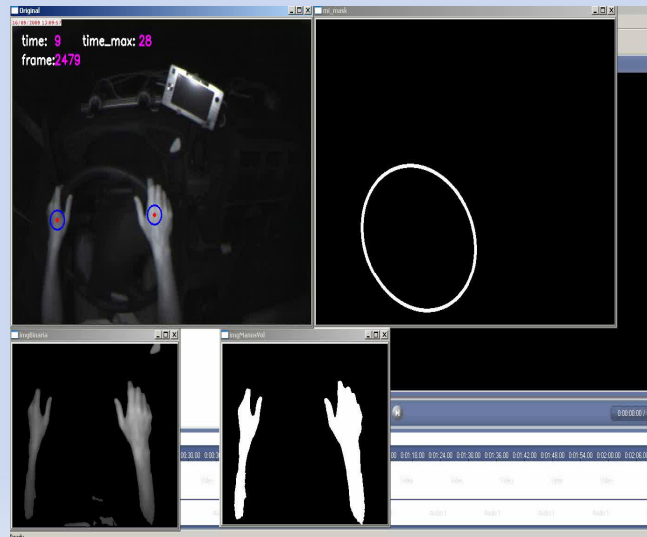
Intelligent Cabin for Road Transportation



## CABINTEC:

Intelligent Cabin for Road Transportation

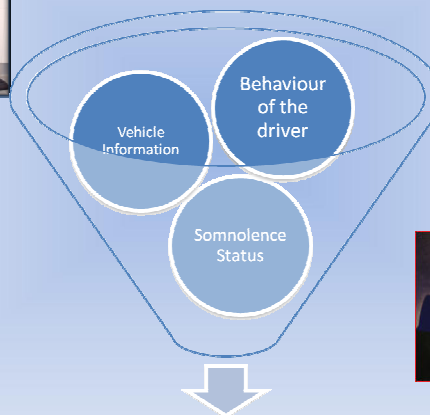




Vehicle Information



Behaviour of the driver



**Alert !**



Somnolence Status

- This project consists on the development of a video sensor in order **to study conflicts at pedestrian crossings** in the city of Salamanca (Spain). The video sensor analyzes a set of images captured at two crossings and, by means of the selection of the elements in the image, distinction between pedestrians and vehicles, **trajectories tracking and speed measurements**, it detects the existence of **pedestrian-vehicle conflicts**. The project was performed in collaboration of the Psychology Department of the Salamanca University, which focused on the obtainment of real parameters that influence the danger degree at pedestrian crossings.

Automatic Classification and Sequential  
Analysis of Pedestrian-Vehicle Conflicts.

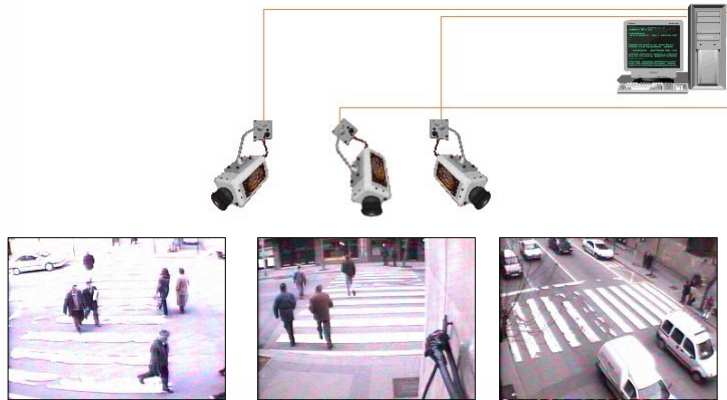


- Conflict



Automatic Classification and Sequential  
Analysis of Pedestrian-Vehicle Conflicts.

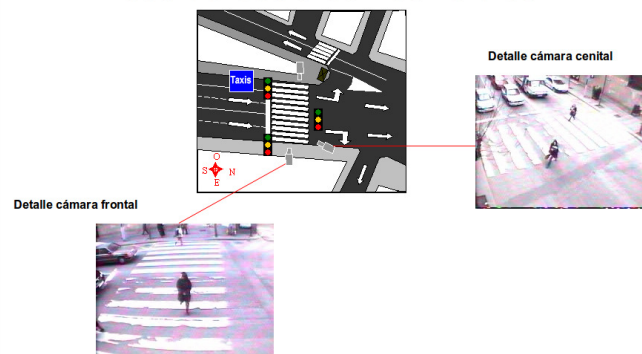




Automatic Classification and Sequential  
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### Paso de Cebra con Semáforos

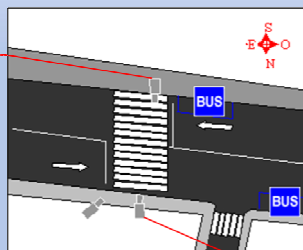


Automatic Classification and Sequential  
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Detalle cámara frontal



Detalle cámara cenital

Automatic Classification and Sequential  
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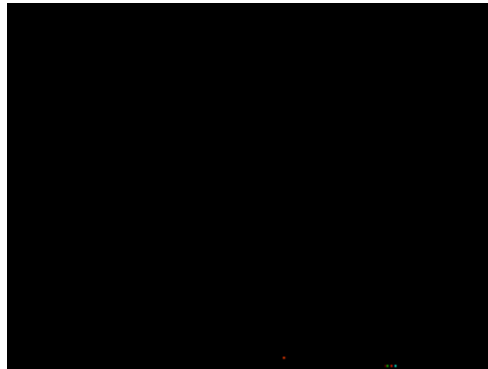
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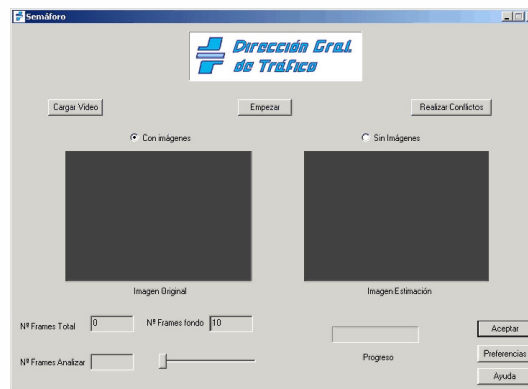
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