COMPANY NAME	ISTOBAL S.A.

GENERALITAT VALENCIANA · IVACE INSTITUTO VALENCIANO DE COMPETITIVIDAD EMPRESARIAL · CEEI Centro Europeo de Empresas e Innovación de Valencia

CHALLENGE SHEET

CHALLENGE CODE	13.1 ISTOBAL

TITLE	Dirt identification.

DESCRIPTION

In the current situation, all automatic vehicle cleaning processes are carried out in the same way, regardless of the initial condition of the vehicle to be washed. This can pose two types of problems. On the one hand, the cleaning result may be insufficient because particularly dirty parts or specific types of dirt may not be cleaned with the appropriate intensity or methodology. On the other hand, the washing process may be excessive and lead to resource wastage if the required cleaning intensity is lower than the established standard. Lastly, there is no information about the initial and final state of the vehicle, making it impossible to evaluate the effectiveness of the process.

HOW COULD WE

The objective would be to obtain a system that allows measuring, estimating, or evaluating the cleanliness status of the vehicle. That is, measuring the amount of dirt present, its distribution on the vehicle surfaces, and, if possible, identifying the type of dirt.

SELECTION CRITERIA

• Feasibility • Ease of implementation • Cost

TARGET INDICATORS

• System effectiveness • Improved washing efficiency • Enhanced machine maintenance

REQUIREMENTS

The proposed solution must comply with the European Data Protection Directive and the Spanish Data Protection Act (LOPD).

CHALLENGE TYPOLOGY	Process	✔ Technology	Business	✔ Product

KEYWORDS	Artificial Vision, Artificial Intelligence, Sensors, Sensoratory Fusion