

#### Universidade do Minho

Escola de Engenharia

# **Smart Street Lighting**

Master in Industrial Eletronics and Computers Engeneering Embedded Systems

### Authors:

Diogo Fernandes PG47150 José Tomás Abreu PG47386

## Supervisors:

Prof. Dr. Tiago Gomes Prof. Dr. Sandro Pinto

October 27, 2021

#### 1 Problem Statement

Nowadays, the energy crisis is a constant theme because of the inflated energy prices. Furthermore, huge energy consumption is a burden to the environment, as not all means of energy production are non-polluting. It is known that, in cities, street lamps are continuously switched on, most of the time unnecessarily, which causes a great waste of energy, also contributing to the increase in light pollution.

With that in mind, the main objective of this project is the creation of a monitoring device capable of controlling intelligent street lamps, which turn on only when they detect movement in the surroundings, adjusting their luminosity according to the needs of the surrounding environment.

## References