Smart parking solutions for Central Business District: Team : SCI-TEAM

Overview

This solution monitors the parking spots in the parking lots near the CDB in real time, analyses and judges in real time. The objective of this solution is to:

- 1. Break the information asymmetry between the driver and the parking lots.
- 2. Improve the utilization rate of parking lots.
- 3. Reduce the cost of manual management.
- **4.** Ease traffic congestion.

System Architecture



Project Architecture



A computer vision module using YOLOv4 developed using python and running as independent application. This module communicates with UC-win/Road through UDP protocol.



A plugin developed in Delphi which acts as a UDP server and receives commands from the python module and updates the simulation accordingly.

Results

The system displays a message whenever it detects vacant parking spaces, and displays on a large screen exactly where in the parking lot, the vacant space is located, in real time.



