

Smart Crosswalks



The problem



Pedestrian safety



Wasted time



Problem relevance

3 939 was the number of people that were hit by cars
in 2021 just in Portugal

Source: PorData

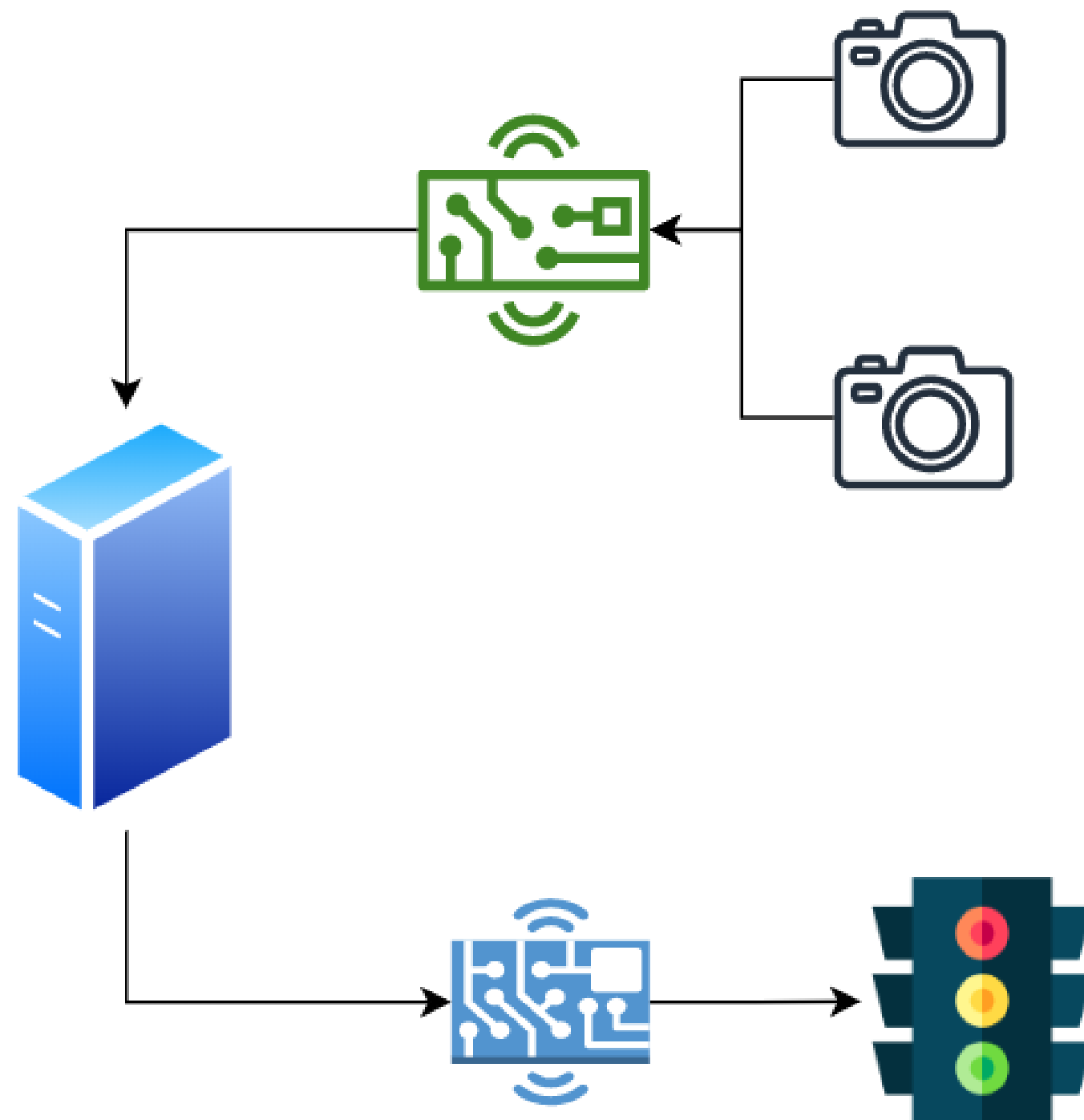
Our solution



Computer Vision



React to traffic events
Improve flow of traffic and pedestrians



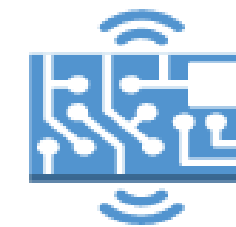
Key:



Central Server



Raspberry Pi



Arduino

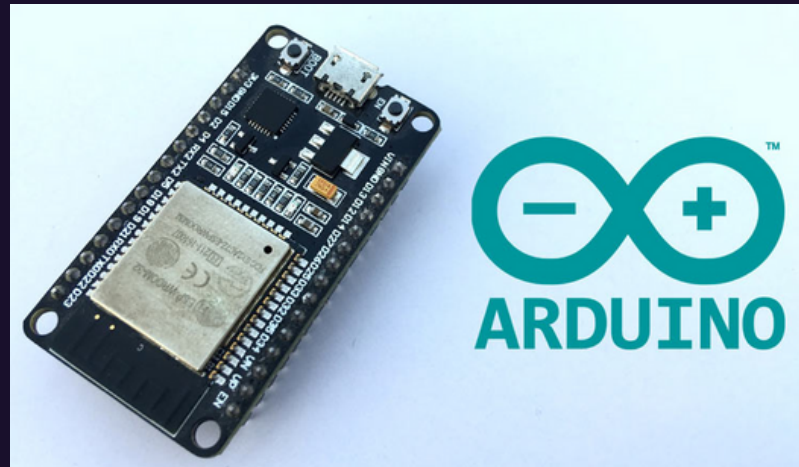


Camera



Stoplight

Setup Process



Connect Raspberry Pi, Arduino
and PC to a LAN



Connect camera to Raspberry Pi
Setup video stream to HTTP Server
Run pedestrian and car inference

WongKinYiu/yolov7

Implementation of paper - YOLOv7: Trainable bag-of-freebies sets new state-of-the-art for real-time object detectors



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Contributors

1k
Issues

10k
Stars

3k
Forks





Pedestrians

Cars