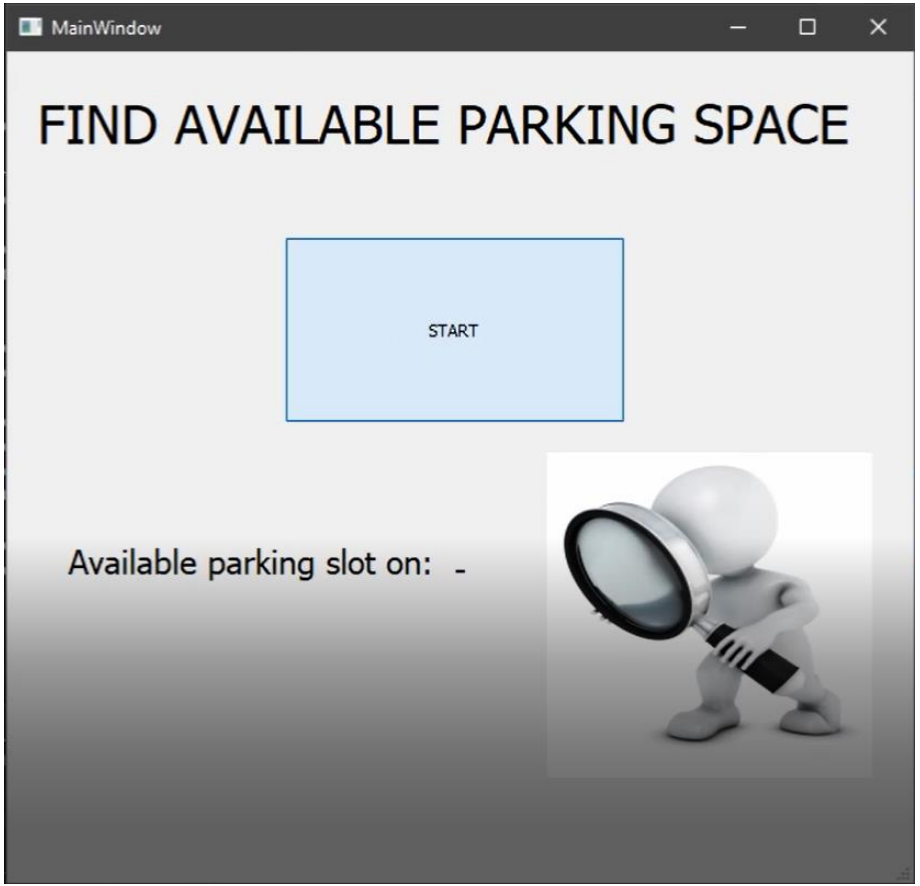
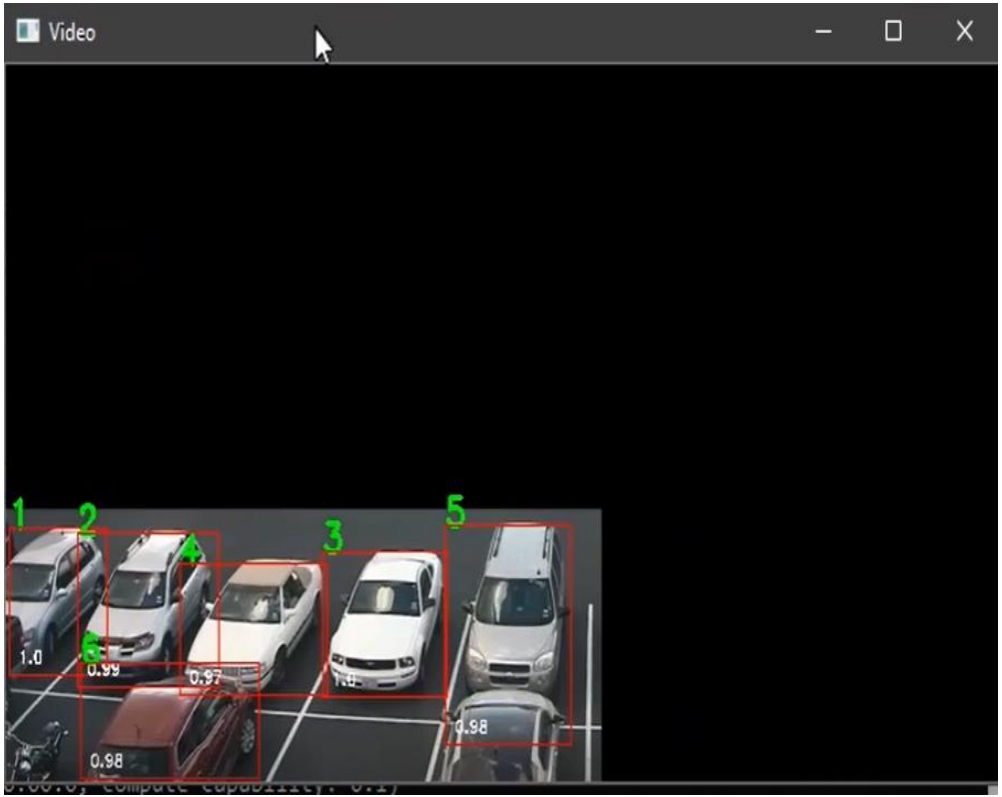
Demo aplikasi dan code tersedia pada link:

https://github.com/kevinicky/Real-Time-Finding-Parking-Space

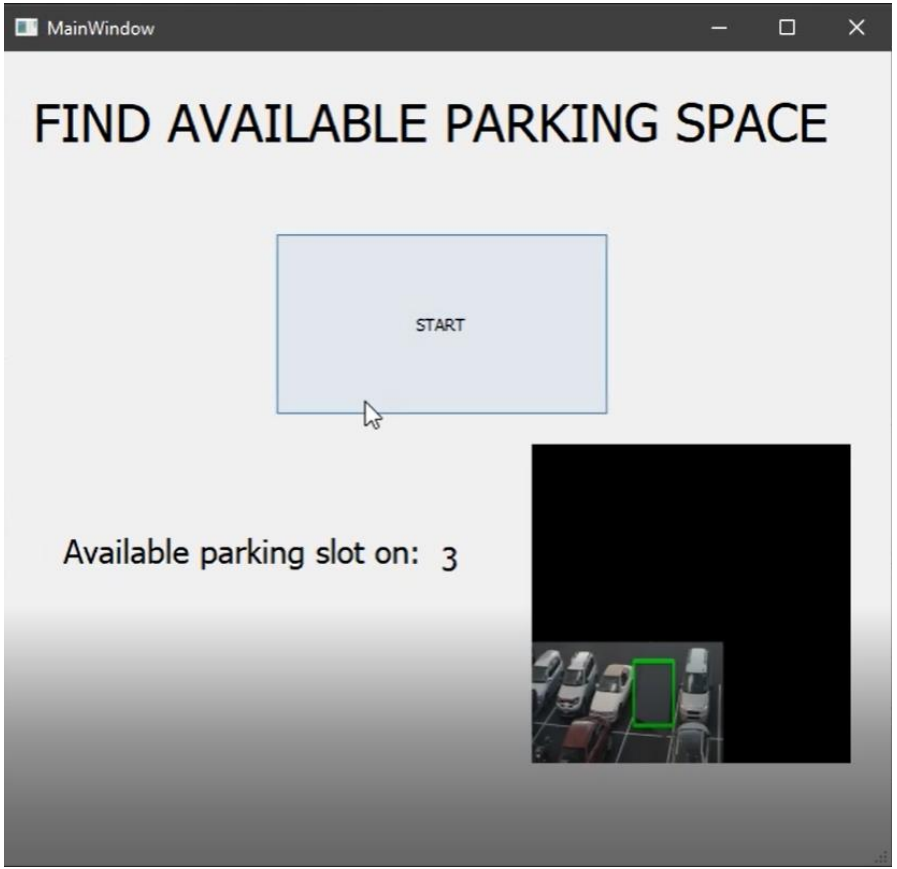
UI Aplikasi


MainWindow
FIND AVAILABLE PARKING SPACE
START
Available parking slot on: -

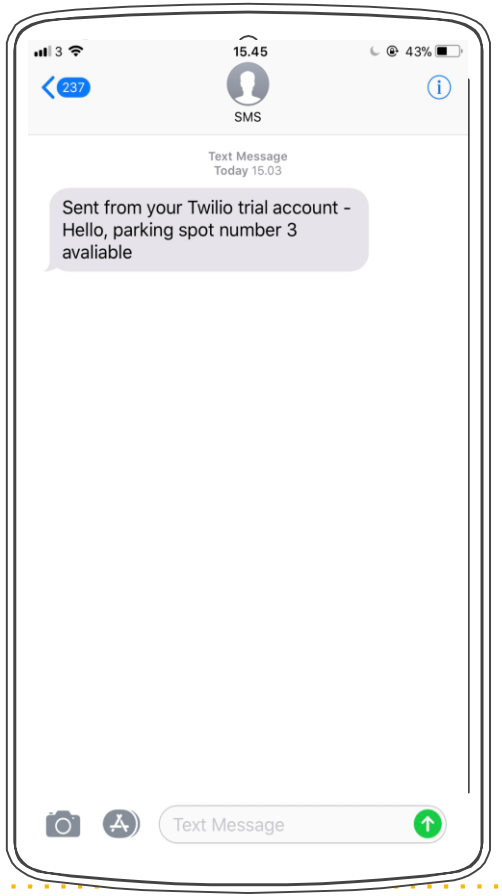
Finding Free Space



Found Free Space



Notified by SMS

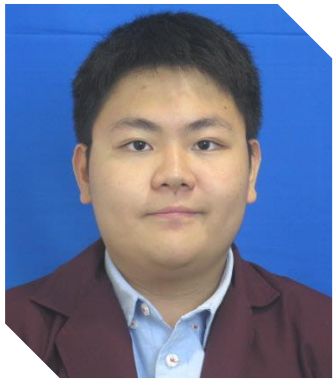


REAL TIME FINDING PARKING SPACE

Created By:

Kevin Nicky Setiawan

2101635076



Steven Budinata

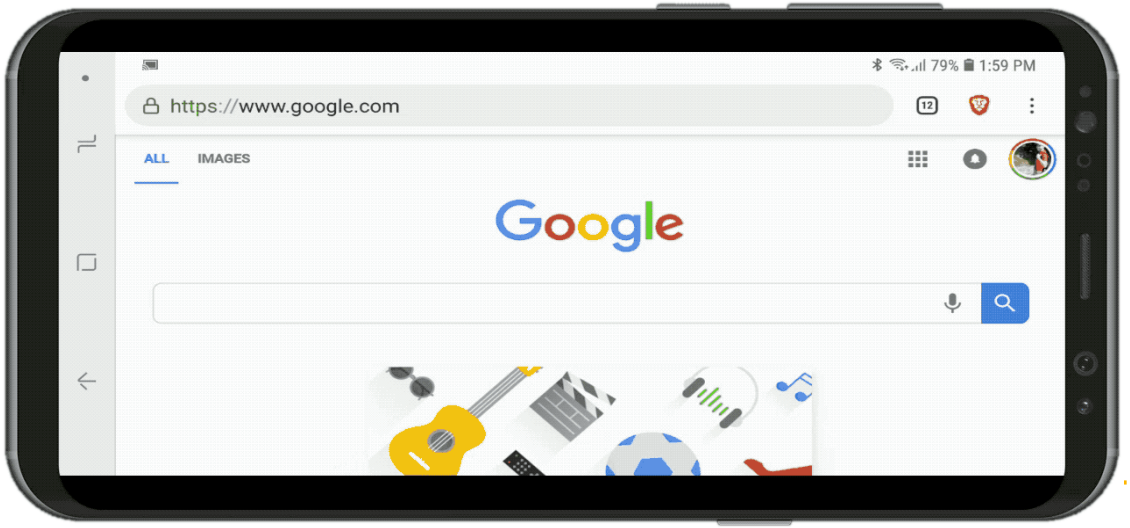
2101636961

Problem

- Finding a parking space in the city is so frustrating especially at the office center, shopping center, or even near the residence

Solution

An application to track if there is available parking space, this could be used by users or even for a parking area provider at the mall or office



How it works

1

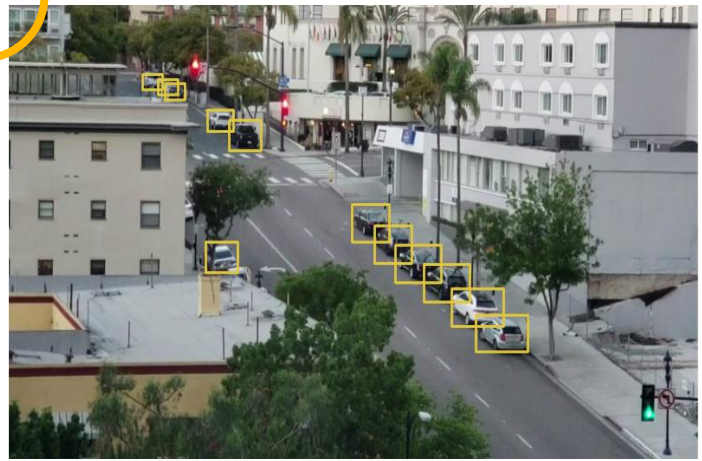
Set the camera towards the parking space

2

Detect parking spaces

How it works

3



Detect cars in the image

4

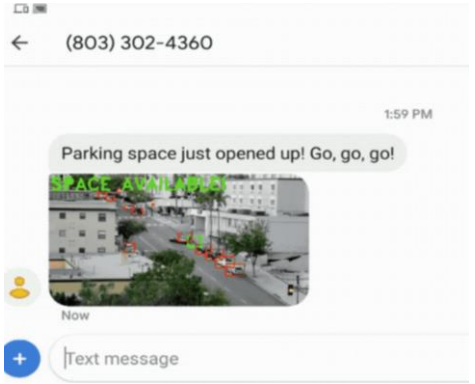
Detect parking space that is newly available then send SMS

What we use

Object Recognition with Mask R-CNN

Dataset from COCO

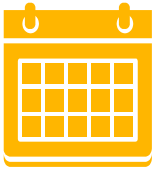
Twilio API for SMS



Key Differentiators

- Object recognition with mask R-CNN is still considered new
- It is a faster technology
- Cheaper
- Useful for cities like Jakarta that lack of packing area

Timeline



1st Week

Mengumpulkan data yang dibutuhkan

2nd Week

Coding

3rd Week

Testing and Improvement

4th Week

Testing Akhir, Prototyping dan pembuatan UI

Resources

- https://medium.com/@ageitgey/snagging-parking-spaces-with-mask-r-cnn-and-python-955f2231c400
- https://www.allstate.com/blog/parking-tips-for-finding-the-best-space/
- https://www.videoblocks.com/video/4k-aerial-tracking-over-full-parking-lots-bhi19ctlbj2t2ein5