











Vehicle Classification, License Plate Detection & Traffic Violations Detection using a Moving Vehicle Platform

ENGR. ALLYSA KATE M. BRILLANTES
INFORMATION SYSTEMS ANALYST II
STARPLAN VI

RATIONALE



Road Management and Traffic Enforcement Systems

In 2018, a total of $\bf 25,469$ illegal-parking incidents were caught via $CCTV_{[2]}$

More convenient and efficient enforcement of illegal parking

Sources

[1] S. N. Domingo, R. M. Briones, and D. Gundaya, "Diagnostic Report on the Bus Transport Sector," 2015.

PROBLEM

Limited coverage of the systems implemented in **static cameras**





High occurrence of traffic violations can be accounted to insufficient traffic enforcement_[3]



ΑI



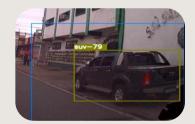


Α			В	С	D
id		vel	hicle type	plate detected?	vid timestamp
18		tric	ycle	yes	0:00:07
20 .			i a a a a a a a a a a a a a a a a a a a		0.00.07
28					
37	V	/ _P	hicle	Informat	inn
_	٧	'e	hicle	Informat	ion
37	٧	_	hicle	Informat	ion 0:00:14
37 46	٧	tric			

Eliminates manual labor from human operators



Evidence



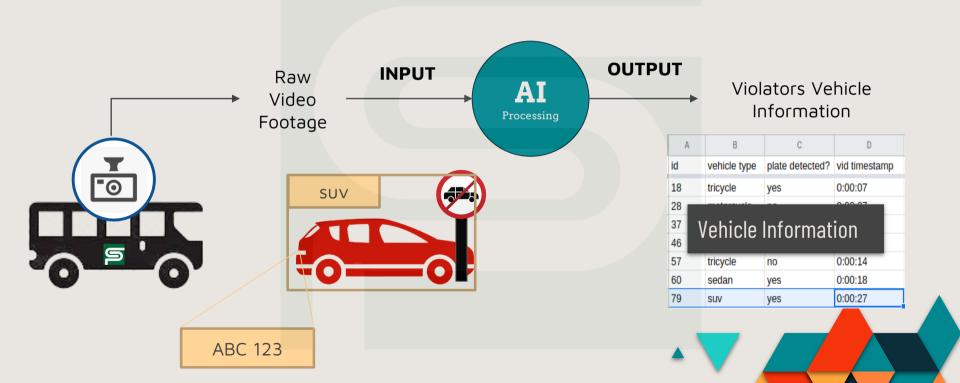
License Plate: ABC 123





Promotes traffic discipline on larger area

SYSTEM SETUP

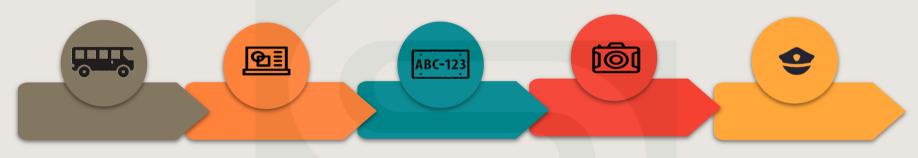




RESULTS

id	vehicle type	plate detected	vid timestamp
241	motorcycle	no	0:00:05
252	motorcycle	no	0:00:06
246	sedan	yes	0:00:06
266	motorcycle	no	0:00:11
269	motorcycle	yes	0:00:11
273	sedan	yes	0:00:11
286	motorcycle	no	0:00:12
288	sedan	no	0:00:12
309	tricycle	no	0:00:17
313	truck	no	0:00:17
312	jeep	yes	0:00:18
352	suv	no	0:00:28
347	suv	yes	0:00:29
387	jeep	yes	0:00:45
393	jeep	no	0:00:48
394	tricycle	no	0:00:48
395	van	yes	0:00:53
403	suv	no	0:00:55

ROADMAP



Integration with ATLAS Vision System

Deployment

Plate Recognition Real-time integration Dashcam processing

Additional Violations



BE OUR PARTNER

- Cooperation with public transport units to collect traffic videos
- Support on implementation of traffic violation detection

CONTACT



NAME	Allysa Kate M. Brillantes
ADDRESS	De La Salle University, 2401 Taft Avenue, Malate, Manila
EMAIL	allysa_brillantes@dlsu.edu.ph



















