



UNIVERSITAS
GADJAH MADA

Pengabdian Masyarakat Lab SKJ
Workshop Online SPBE untuk ASN

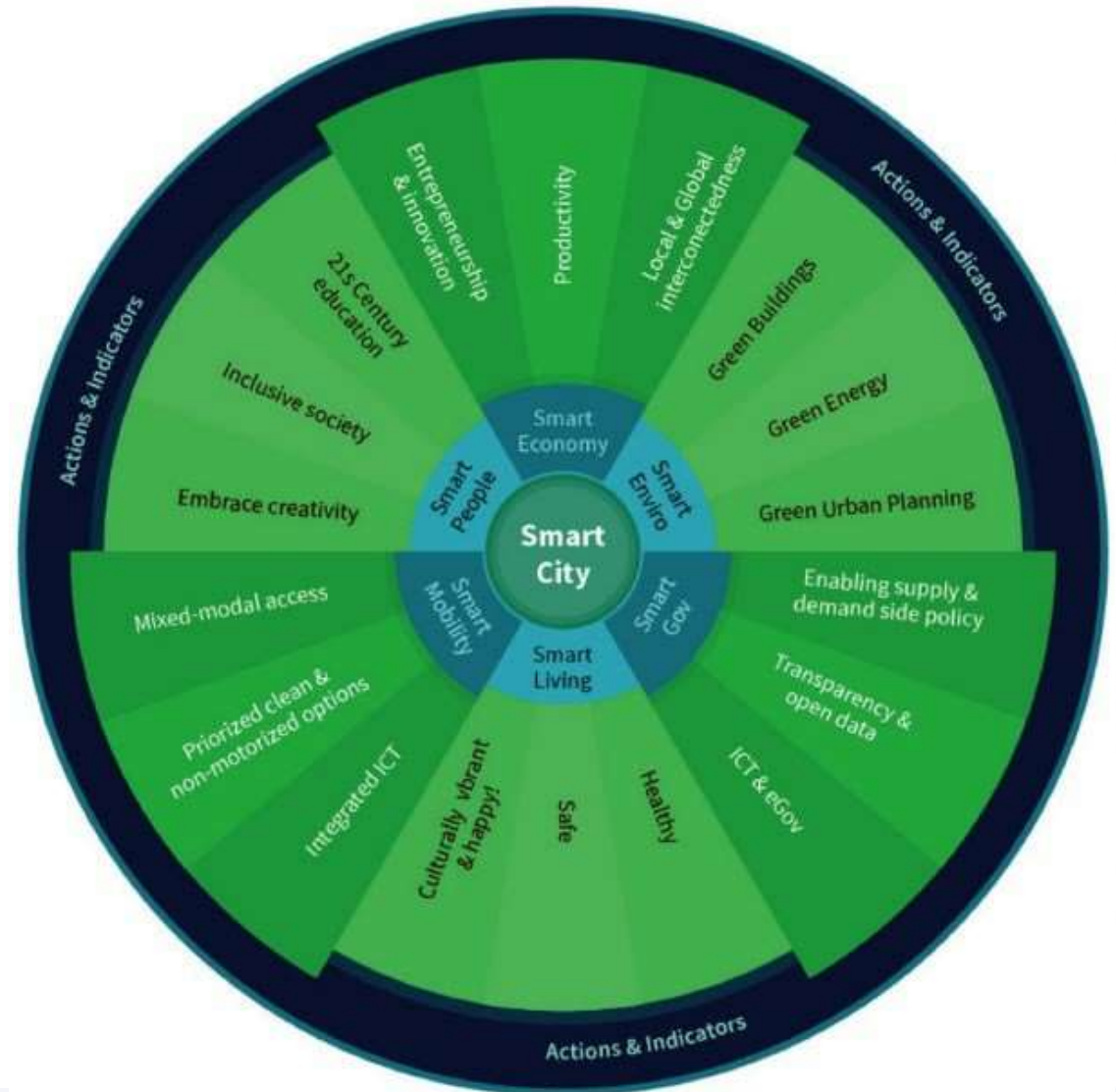
Otomatisasi Kota (Surveillance Systems)

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Otomatisasi Kota (Smart City)

- (1) Smart economy;
 - (2) Smart mobility;
 - (3) Smart environment;
 - (4) Smart people;
 - (5) Smart living;
 - (6) Smart governance,
- (Boyd Cohen, 2012)



Smart City Indicator

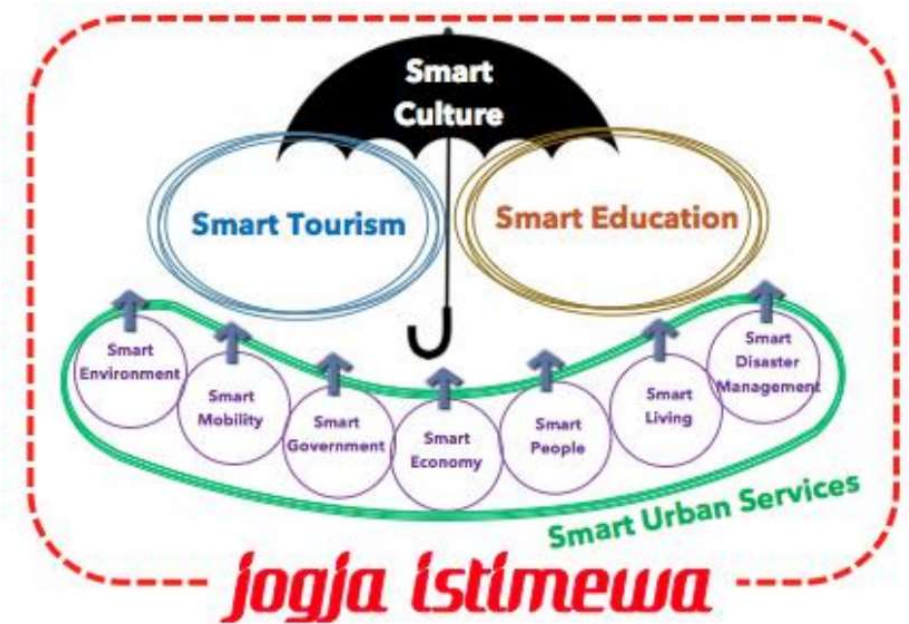
- Smart Surveillance Systems

Dimension	Working Area	Indicator
Smart Environment	Smart Buildings	Sustainability-certified Buildings
		Smart homes
		Energy
	Resources Management	Carbon Footprint
		Air quality
		Waste Generation
		Water consumption
	Sustainable Urban Planning	Climate resilience planning
		Density
Green Space per capita		
Smart Mobility	Efficient Transport	Clean-energy Transport
	Multi-modal Access	Public Transport
		Smart cards
	Technology Infrastructure	Access to real-time information
Smart Government	Online services	Online Procedures
		Electronic Benefits Payments
		WiFi Coverage
	Infrastructure	Broadband coverage
		Sensor Coverage
		Integrated health + safety operations
		Open Data
	Open Government	Open Apps
		Privacy
Smart Economy	Entrepreneurship & Innovation	New startups
		R + D
		Employment levels
	Productivity	Innovation
		GRP per capita
	Local and Global Conexion	Exports
Smart People	Inclusion	Internet-connected Households
		Smart phone penetration
		Civic engagement
	Education	Secondary Education
		University Graduates
	Creativity	Foreign-born immigrants
		Urban Living Lab
		Creative Industry Jobs
	Smart Living	Culture and Well-being
Gini Index		
Quality of life ranking		
Safety		Investment in Culture
		Crime
		Smart Crime Prevention
Health	Single health history	

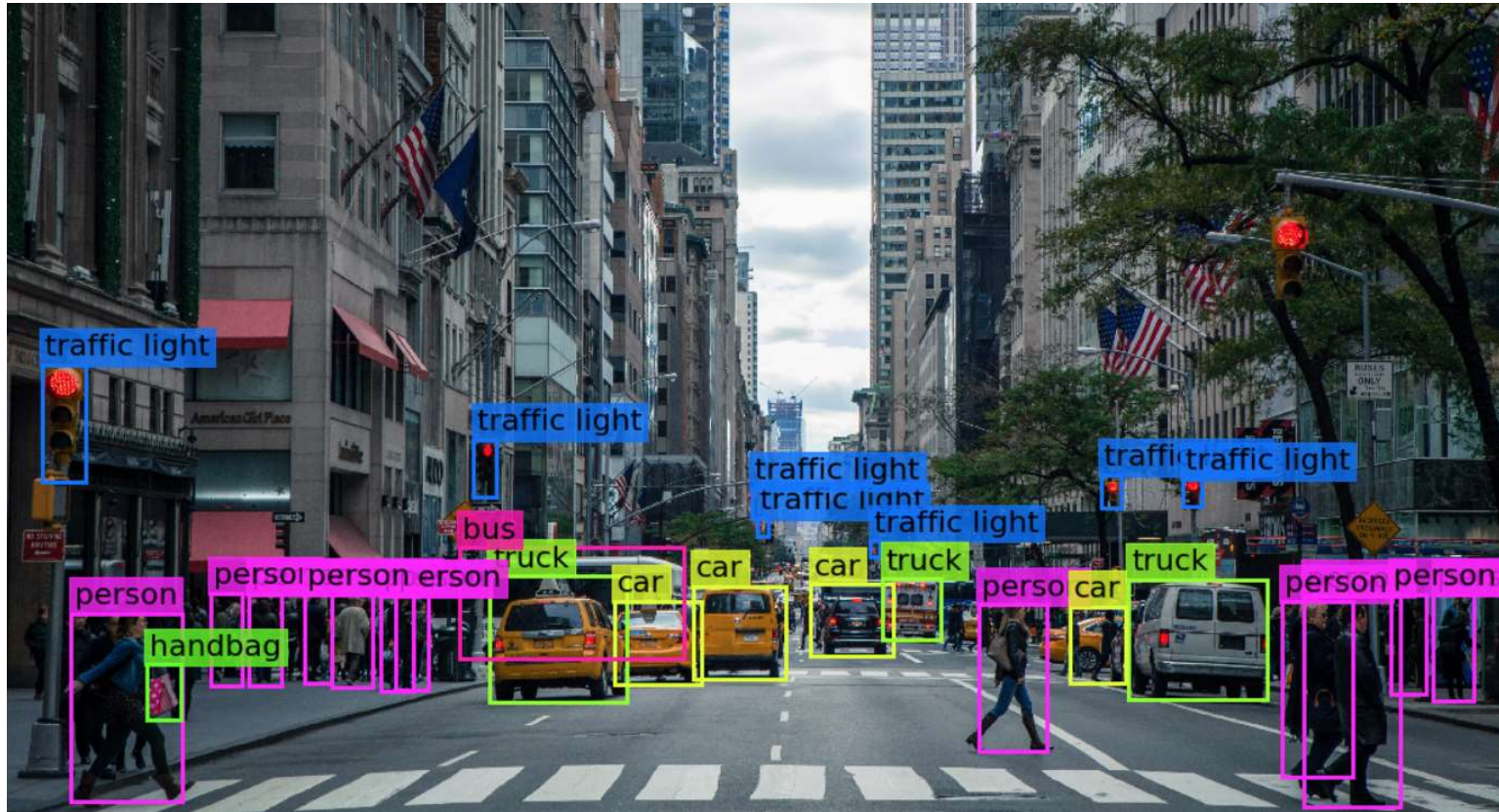
Smart City Yogyakarta

The screenshot shows the website for Jogja Smart Province. The header includes the logo and navigation links: Agenda, Visi & Misi, Development Plans, Download Blueprint, and Gallery. The main content area is titled "Development Plans" and is dated 23 March 2019. It lists development plans for Jogja Smart Province with a focus on development priorities. The text states that based on the TIK vision and survey results, nine initiatives are prioritized for development in the DIY region:

1. Peningkatan kualifikasi dan jumlah SDM dengan kualifikasi TI secara terencana dan berkesinambungan;
2. Pengembangan platform integrasi aplikasi-aplikasi yang telah berjalan dengan mempertimbangkan tugas pokok keterpaduan data primer (data utama milik unit kerja);
3. Melakukan perbaikan koneksi internet dan konektivitas intranet antar unit kerja ke kantor Gubernur/Kominfo;
4. Menyediakan kebijakan implementasi TIK yang menyeluruh dan menjangkau seluruh OPD;
5. Pengadaan dan pengembangan sistem untuk mendukung performa pelayanan publik yang maksimal (good and dilakukan oleh Perangkat Daerah);
6. Pengembangan Command Center di Pemerintah Daerah Istimewa Yogyakarta (IDMC);
7. Pengembangan Data Center yang handal;



ICT Technology



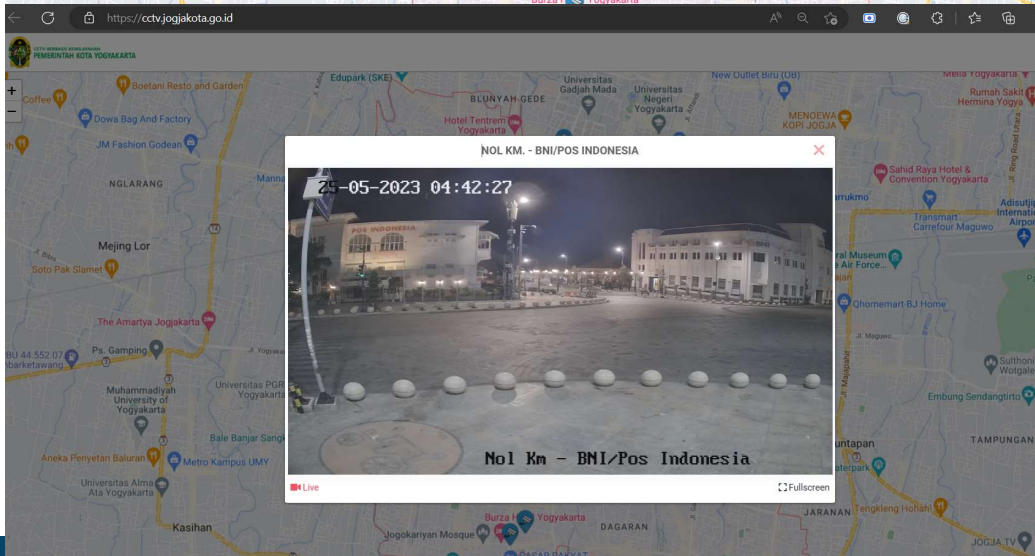
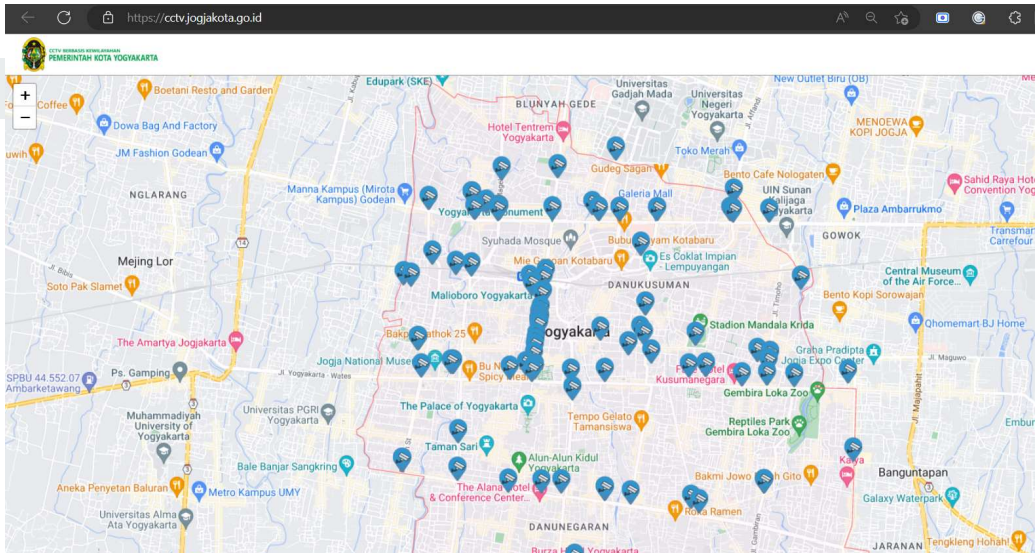
Chinese Street Surveillance (2017)

The image displays a sophisticated street surveillance interface titled "SENSEVIDEO". At the top right, it shows the date and time: "2017-03-28 TUE 09:54:58". Below this, a dashboard provides real-time statistics: "Camera 1", "Vehicle 23", "Cyclist 41", "Ped 29", and "Alarm 0". There are also circular indicators for "50" and "25".

The main display area shows a street scene with various vehicles and pedestrians. Each object is enclosed in a colored bounding box (blue for vehicles, red for cyclists, yellow for pedestrians) with a corresponding label. Labels include "White", "Gray", "Van", "Cyclist", "Adult", "Male", "Female", "Trousers", "ShortSleeve", "Black", "Blue", "Red", "Big truck", "White SUV", and "Blue Car".

On the left side, there is a "Vehicle Image" gallery showing a sequence of frames from 09:54:57 to 09:54:59. On the right side, there is a "Pedestrian" gallery showing a sequence of frames from 09:54:57 to 09:54:59.

At the bottom center, the logo "SENSETIME | 商湯科技" is visible.

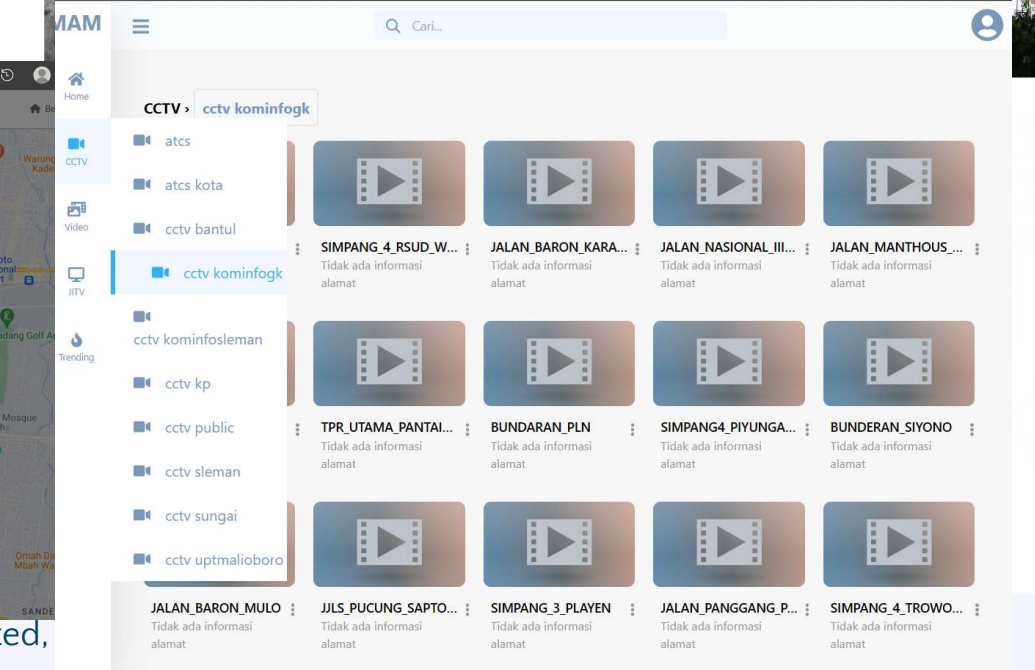
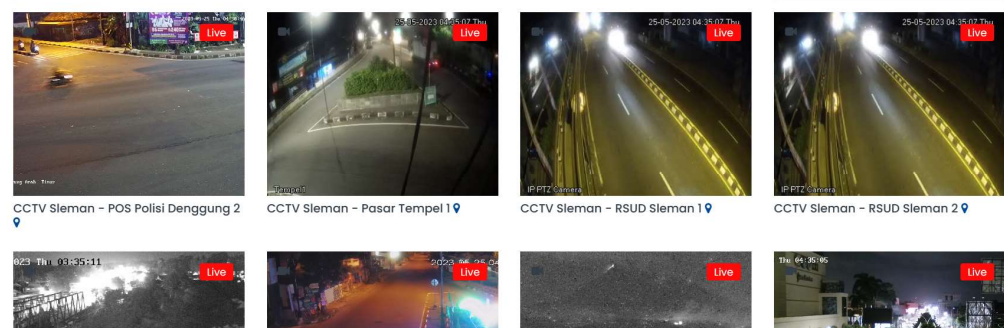


www.ugm.ac.id

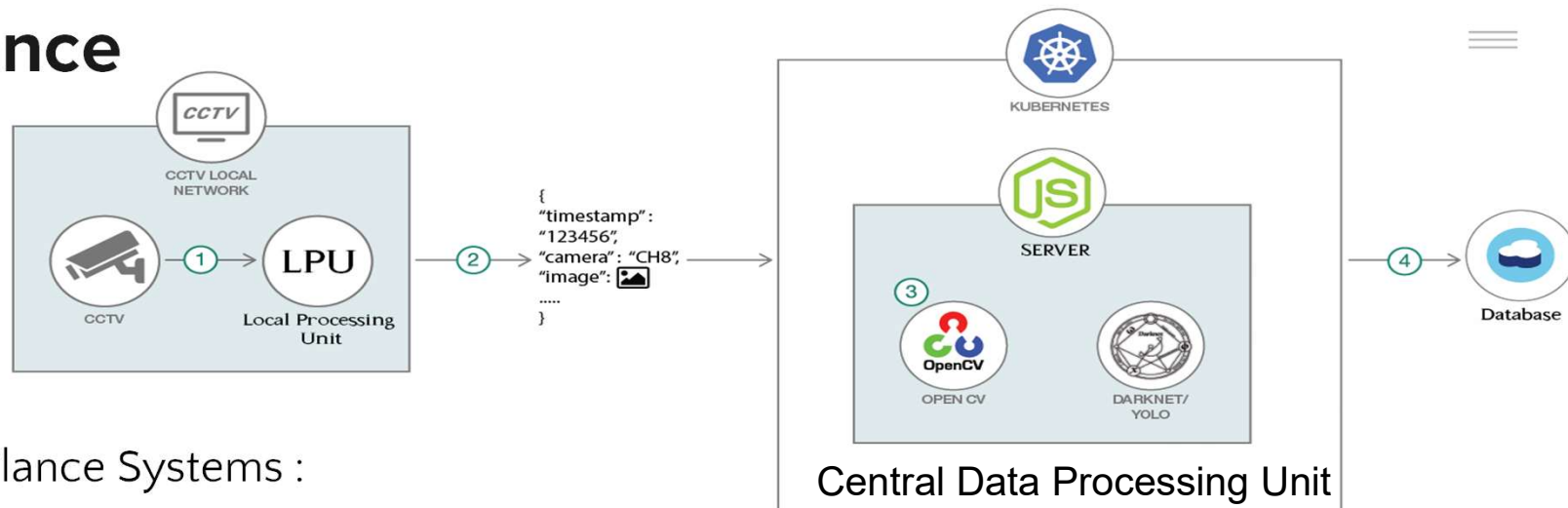
Locally Rooted,



CCTV 24Jam



Surveillance Concept



Smart Traffic Surveillance Systems :

1. Informasi Real time Traffic Flow dan Automatic Report
2. Deteksi kecelakaan dan mengirimkan informasi dini ke pihak kepolisian terdekat
3. Deteksi Pelanggaran Lalu Lintas :
 - Illegal parking
 - wrong way detection
 - Helmet violation
 - Running red Light

4. Kendali lampu lalu lintas berdasarkan kepadatan lalu lintas

Face Recognition and Surveillance :

1. Monitoring pedestrian di area wisata
2. deteksi dini tindak kejahatan pada public area

Traffic Surveillance

Fitur :

1. Traffic Flow berdasarkan jenis kendaraan
2. Invalid / wrong way Detection

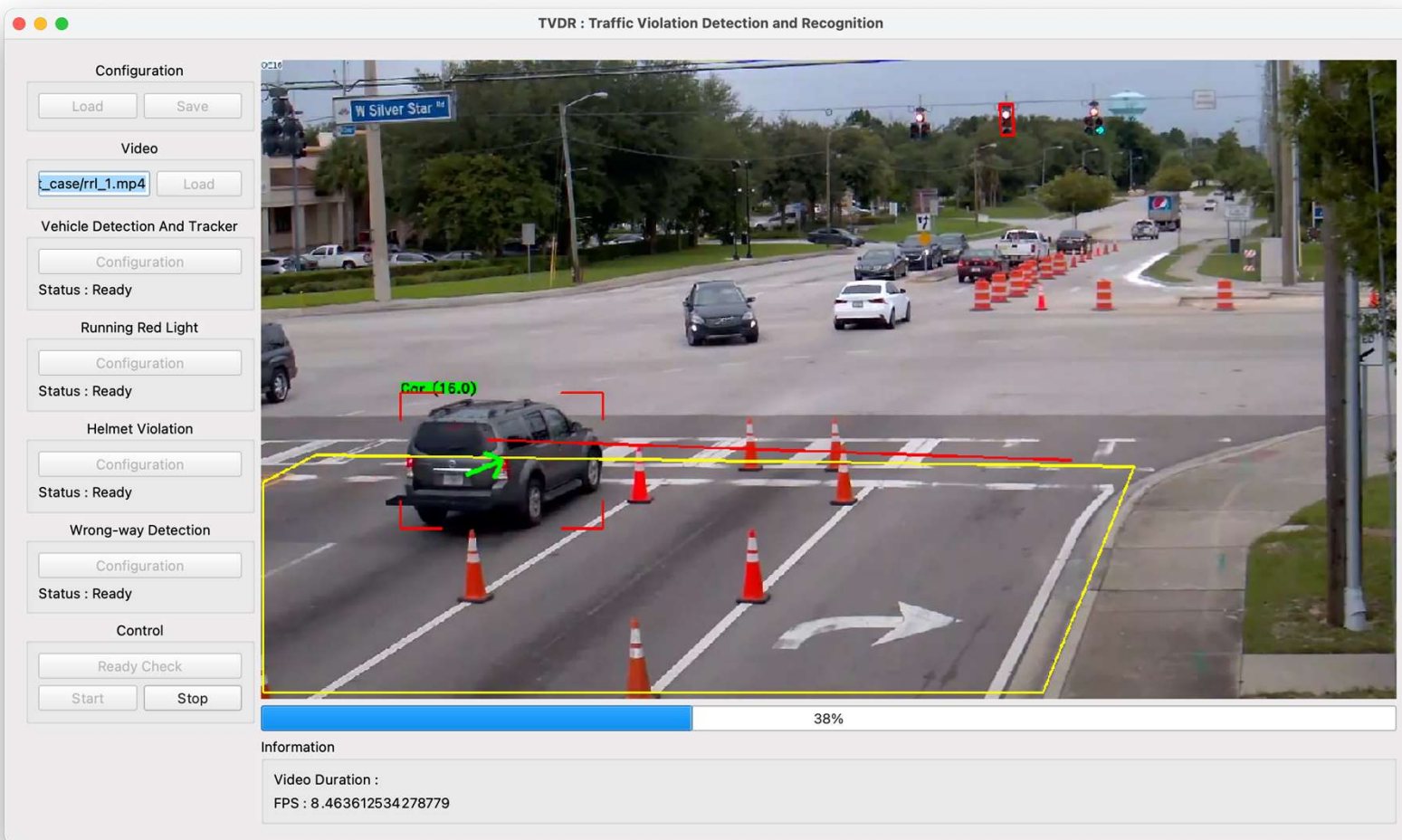
The screenshot shows the website for 'Free Screen Recorder'. The browser address bar displays 'Free Screen Recorder | chrome-extension://ppnhmbecmjohhacmbjcefmfmfhanjecaa/index.html'. The website header includes the title 'Free Screen Recorder' and navigation links for 'Home', 'Extension Features', 'F.A.Q', and 'Contact the Developer'. The main content area features the text 'Start your recording' above a video player. The video player shows a 0:00 duration and a play button. Below the video player is a 'Stop' button with a square icon. To the right of the video player is an illustration of a person sitting at a desk with two computer monitors, a lamp, a clock, and a coffee cup.

Traffic Violation and Recognition (TVDR)

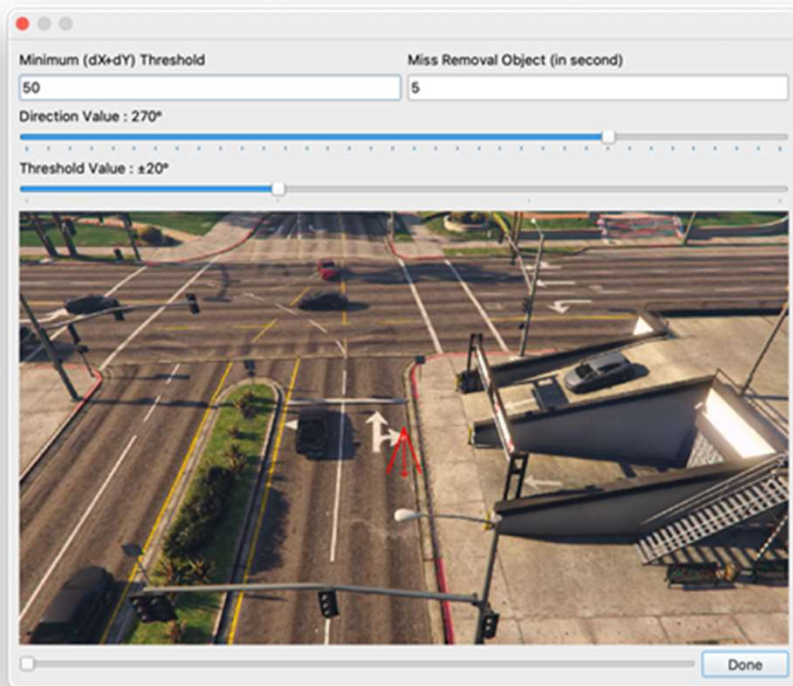
Fitur pada sistem

terintegrasi :

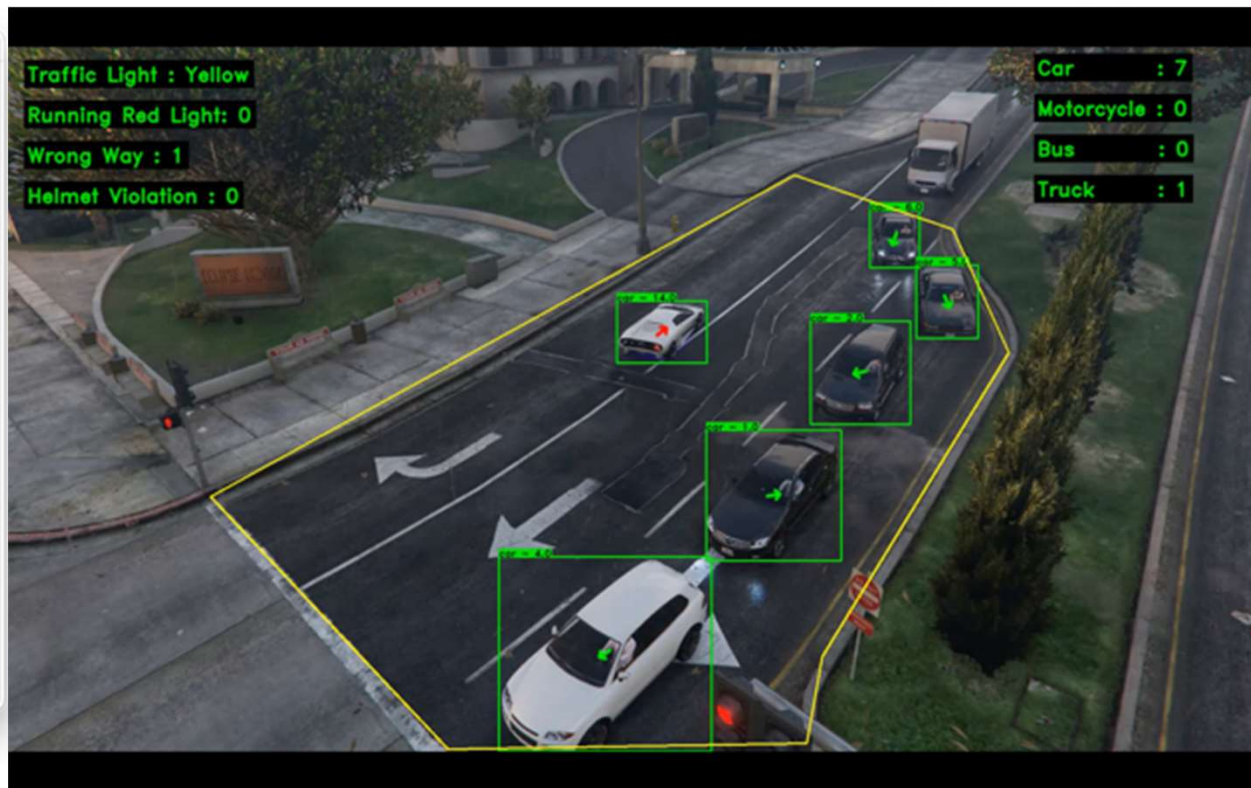
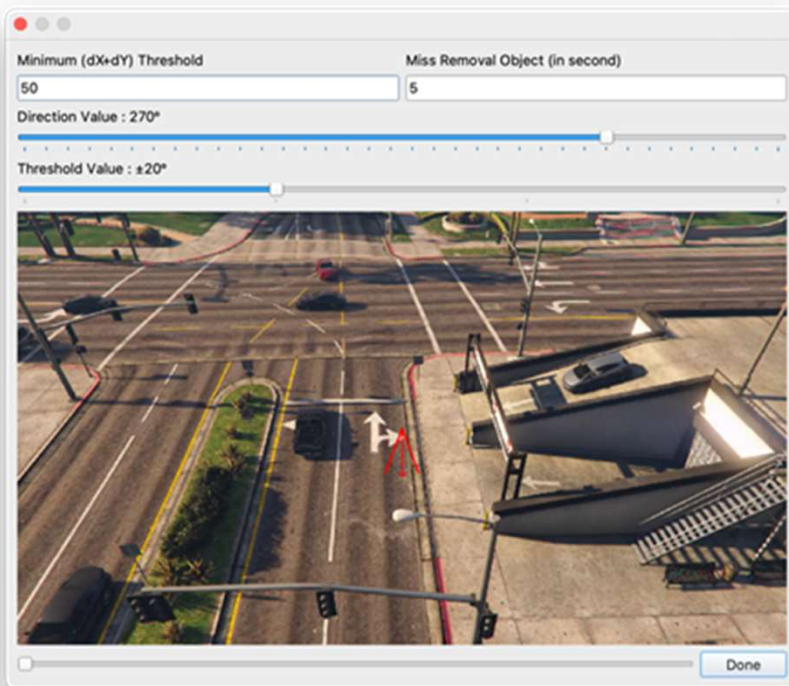
1. Traffic Flow (Vehicle detection and Tracking)
2. Wrong Way Detection
3. Running Red Light
4. Helmet violation



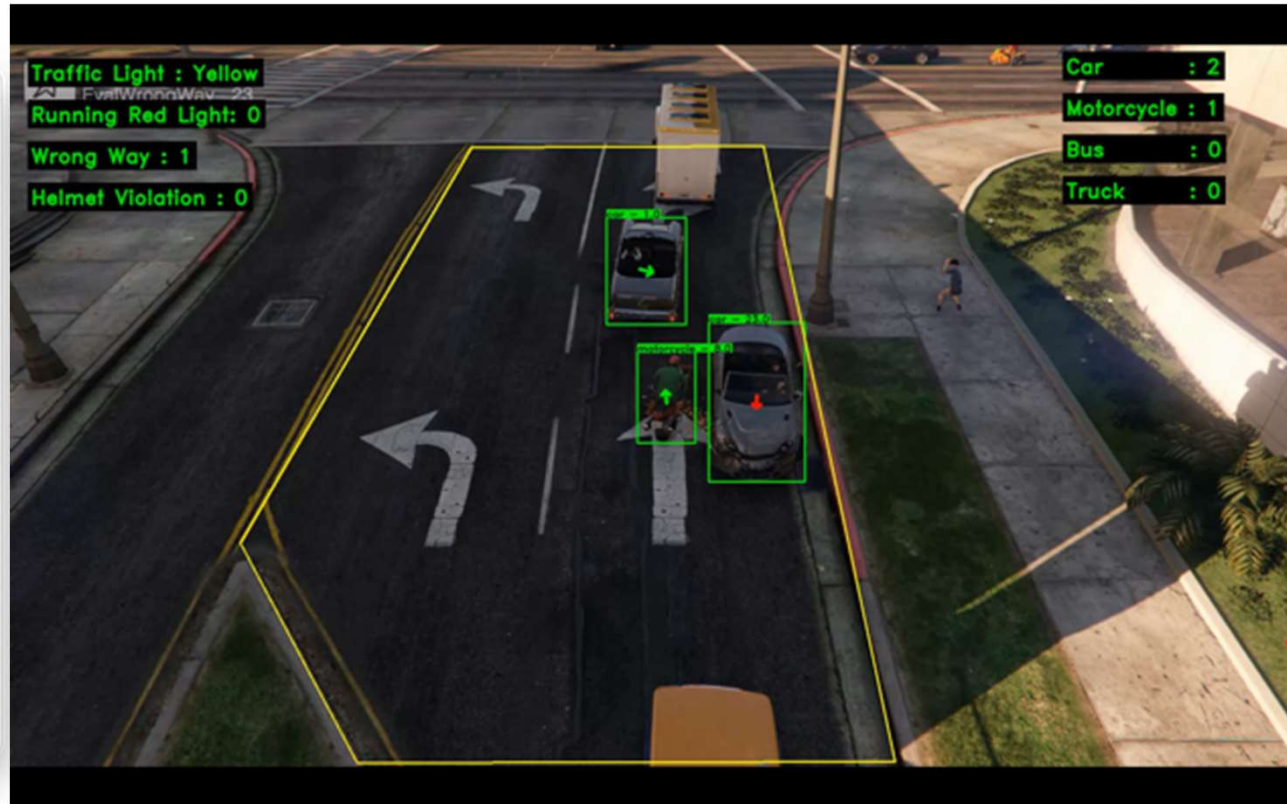
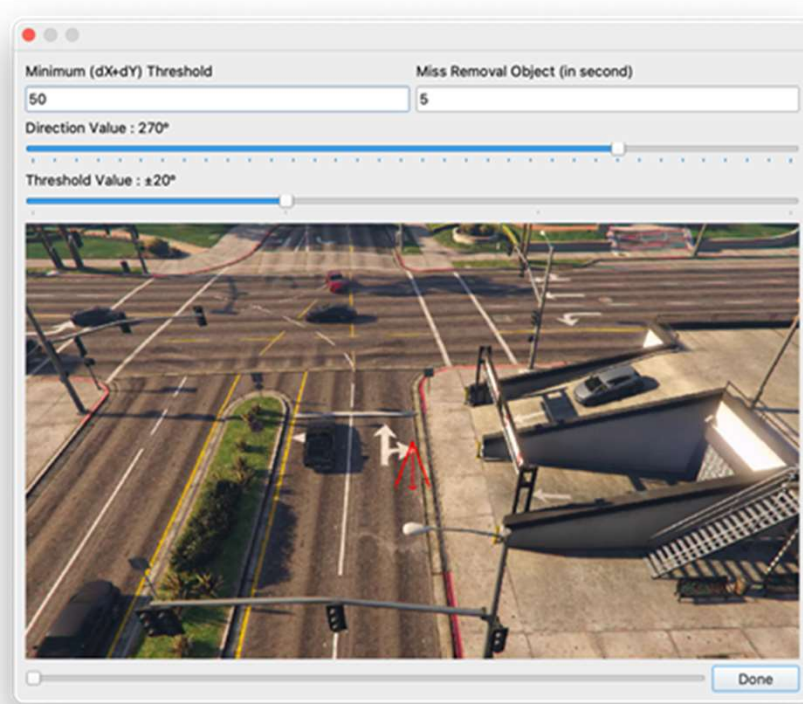
Wrong Way Detection



Wrong Way Detection

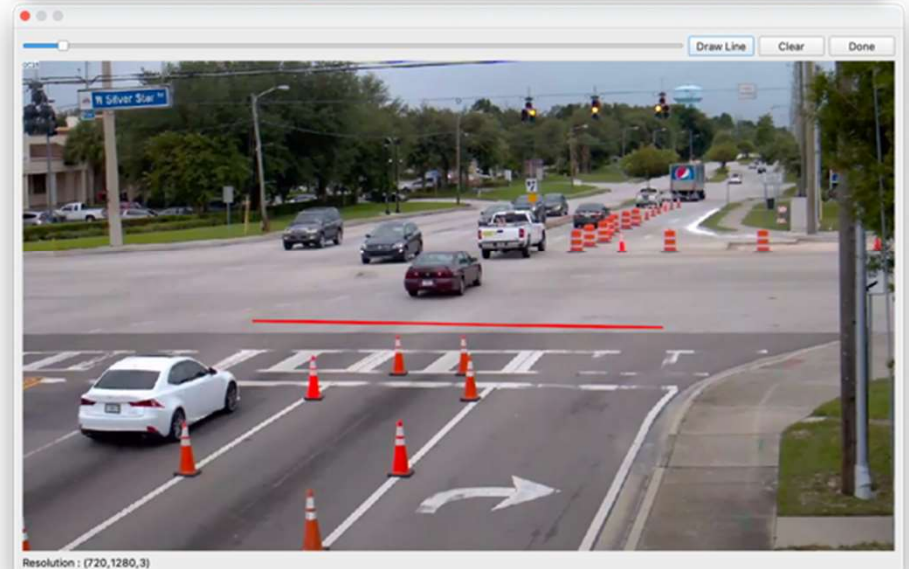
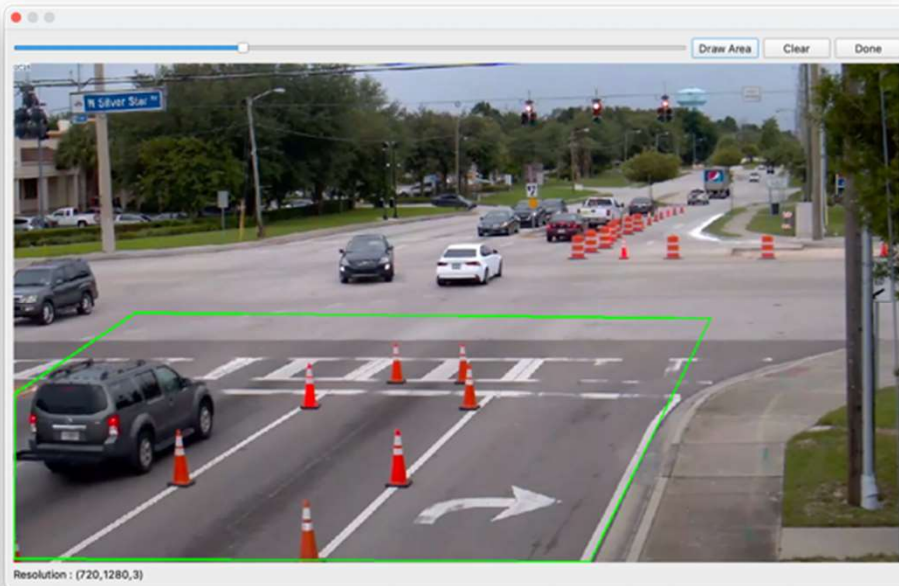


Wrong Way Detection



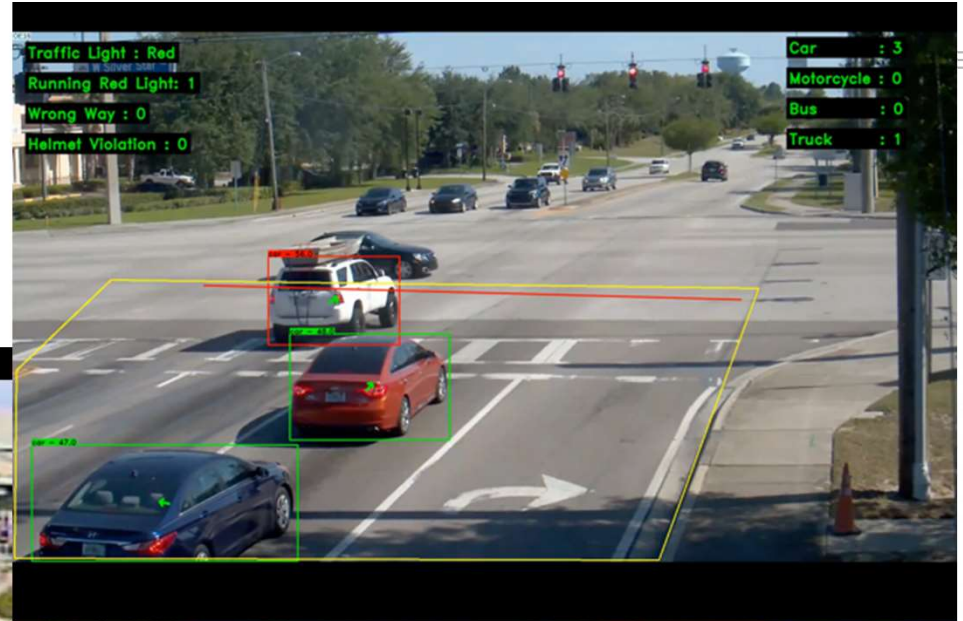
Running Red Light

- Konfigurasi

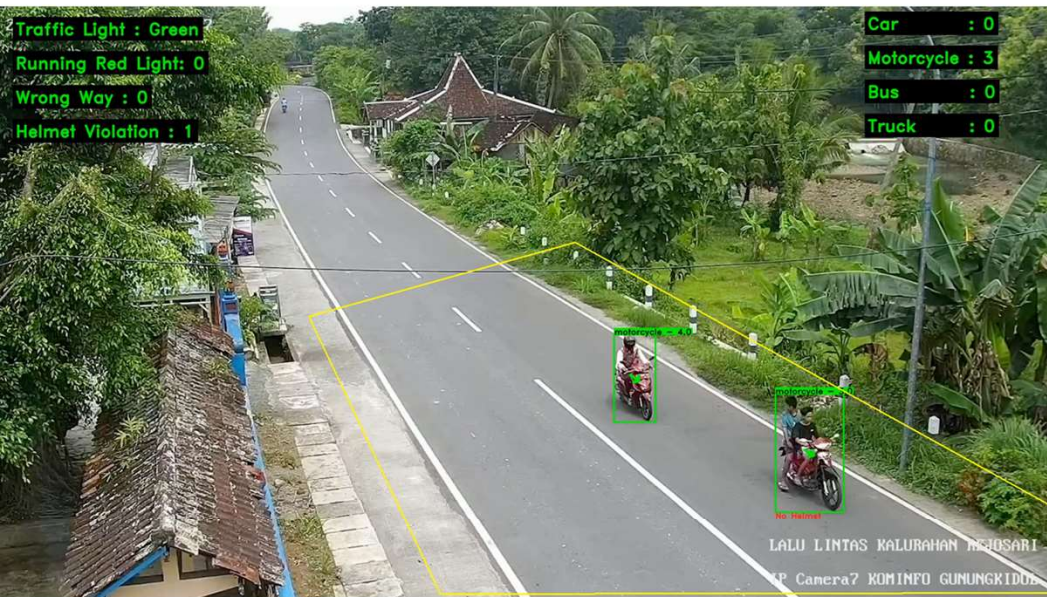


Running Red Light

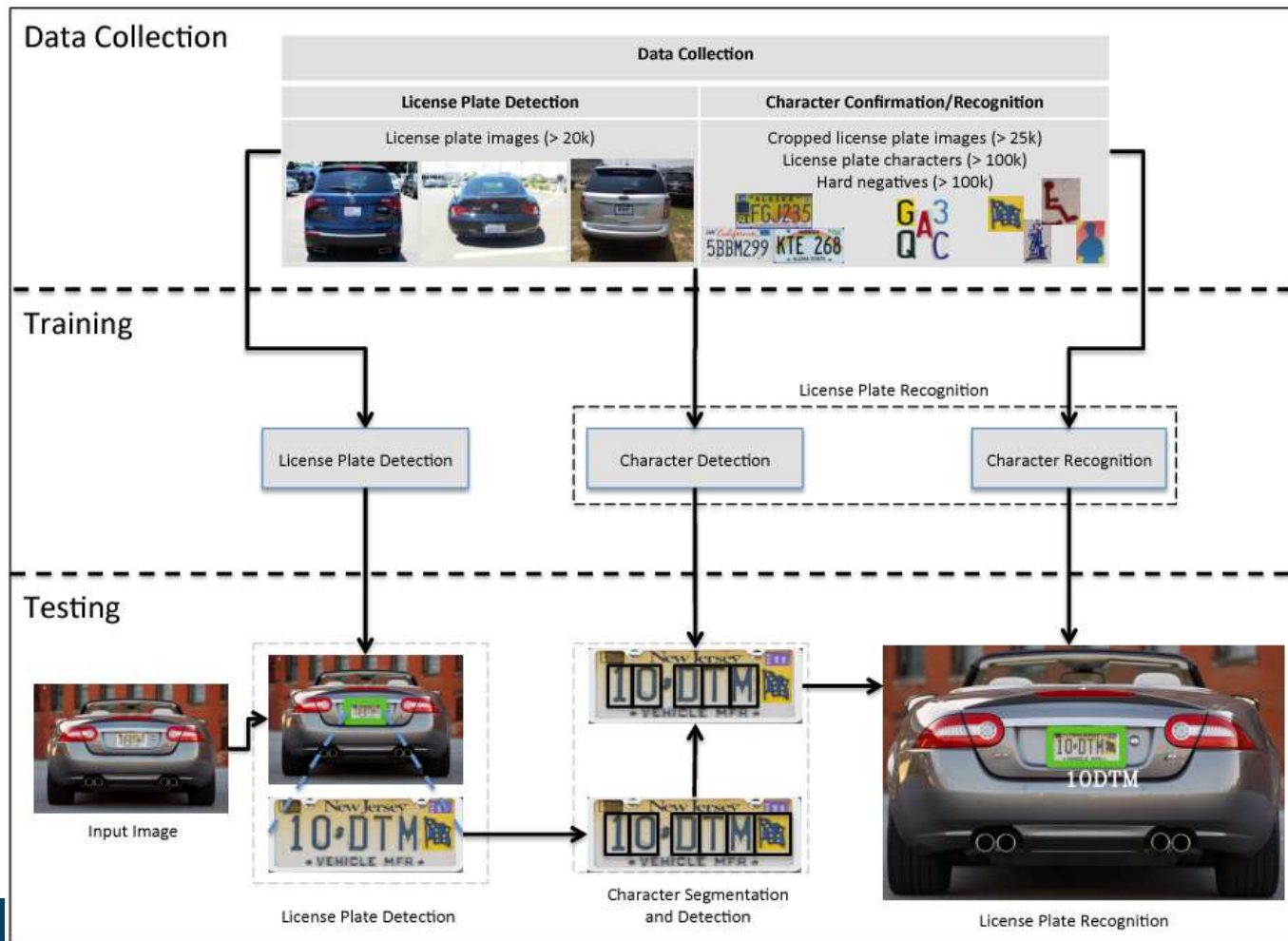
- Result



Helmet Violation



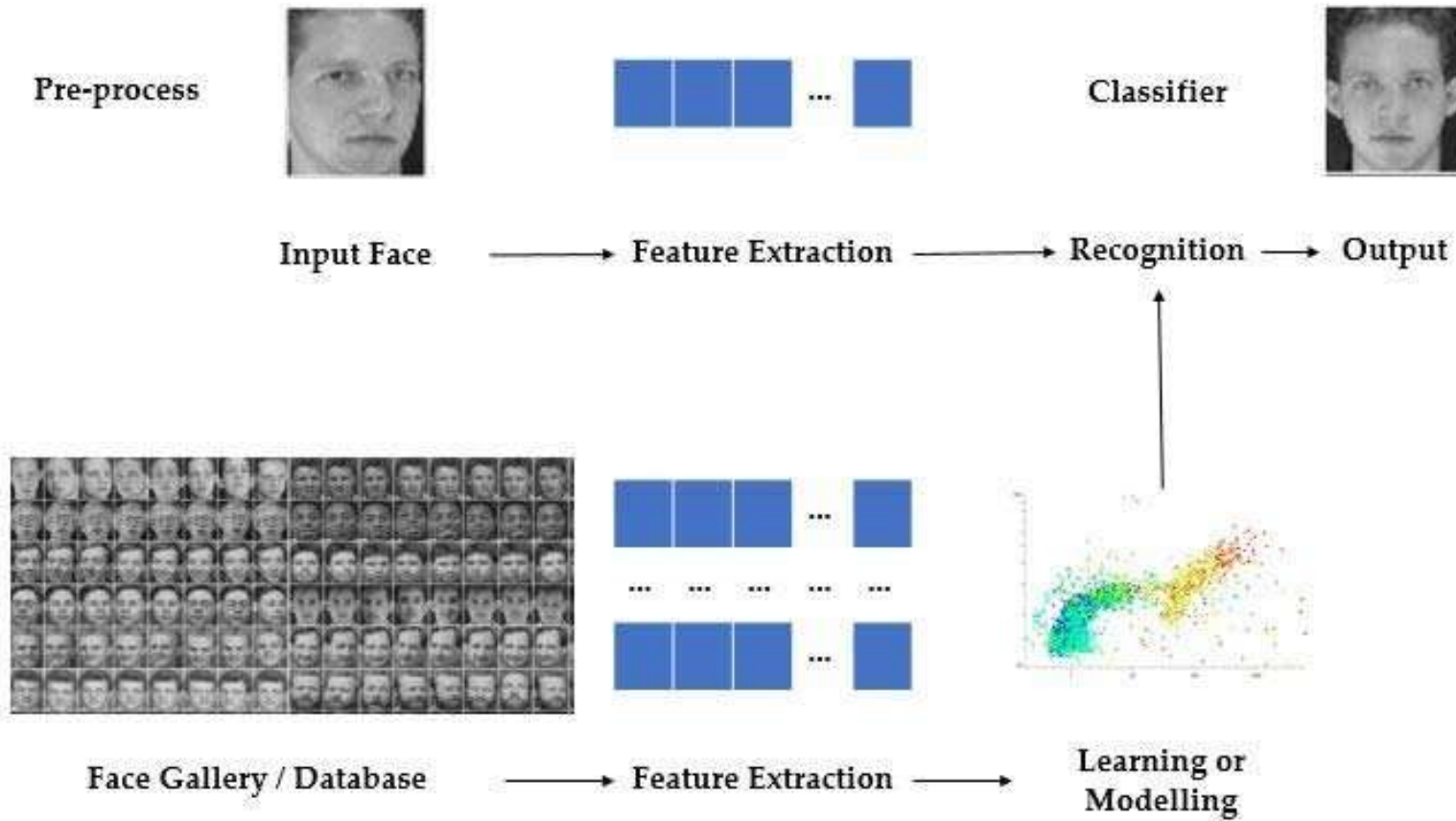
License Plate Detection and Recognition



Kebutuhan Implementasi pada sistem TVDR :

Kamera akusisi dengan resolusi video / image yang tinggi

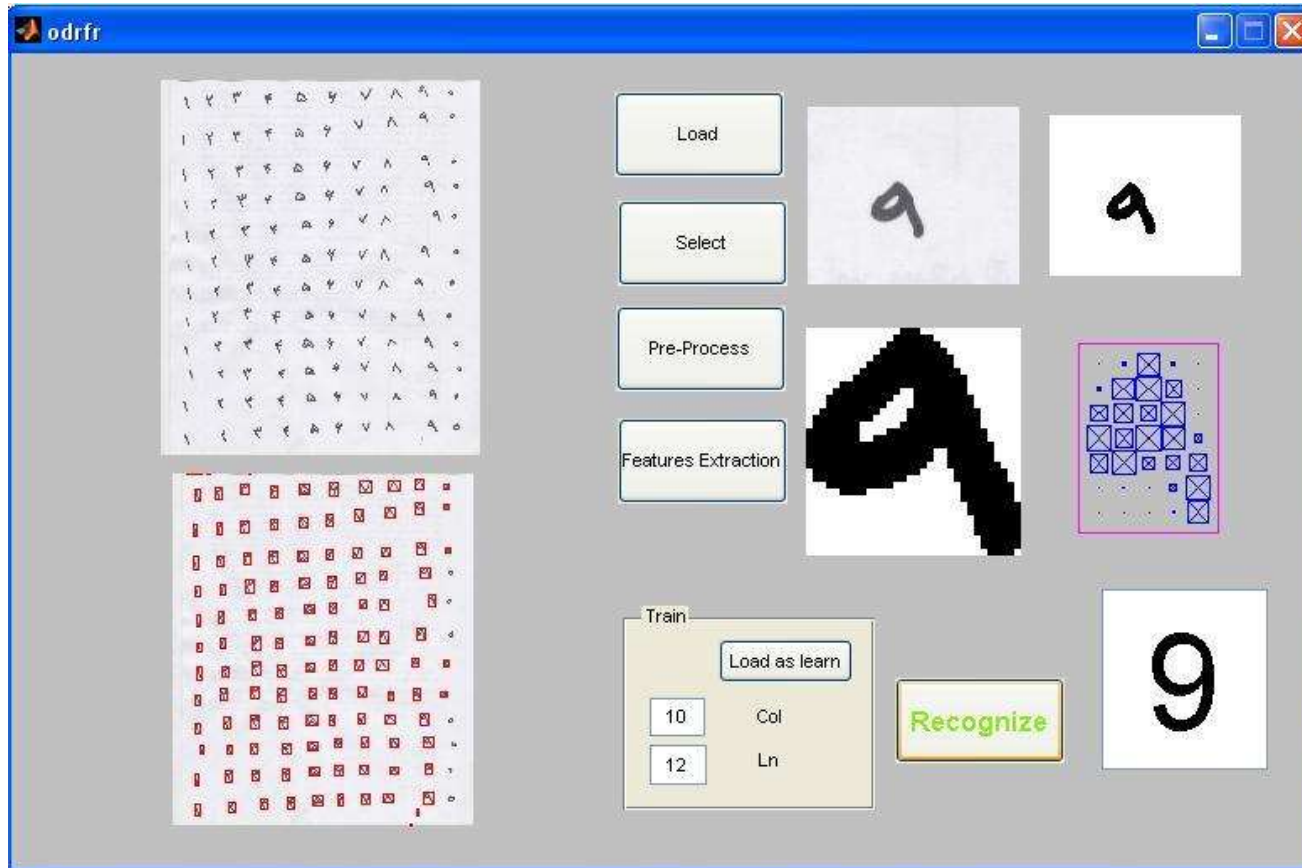
Face Recognition



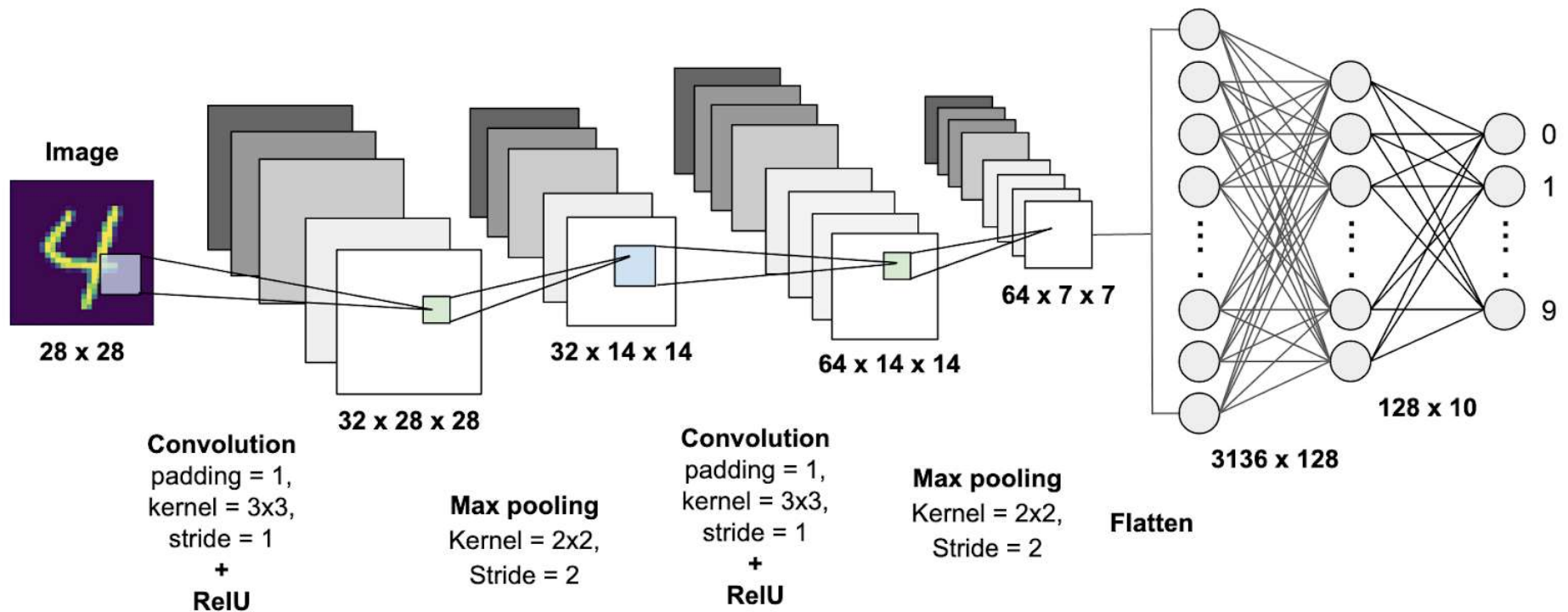
Face Recognition :



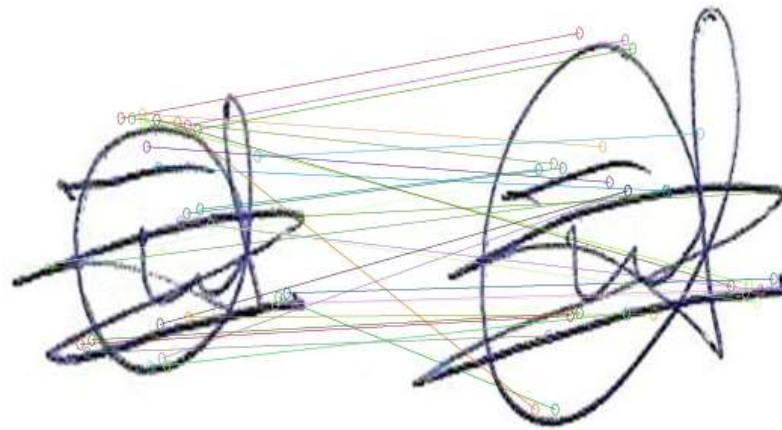
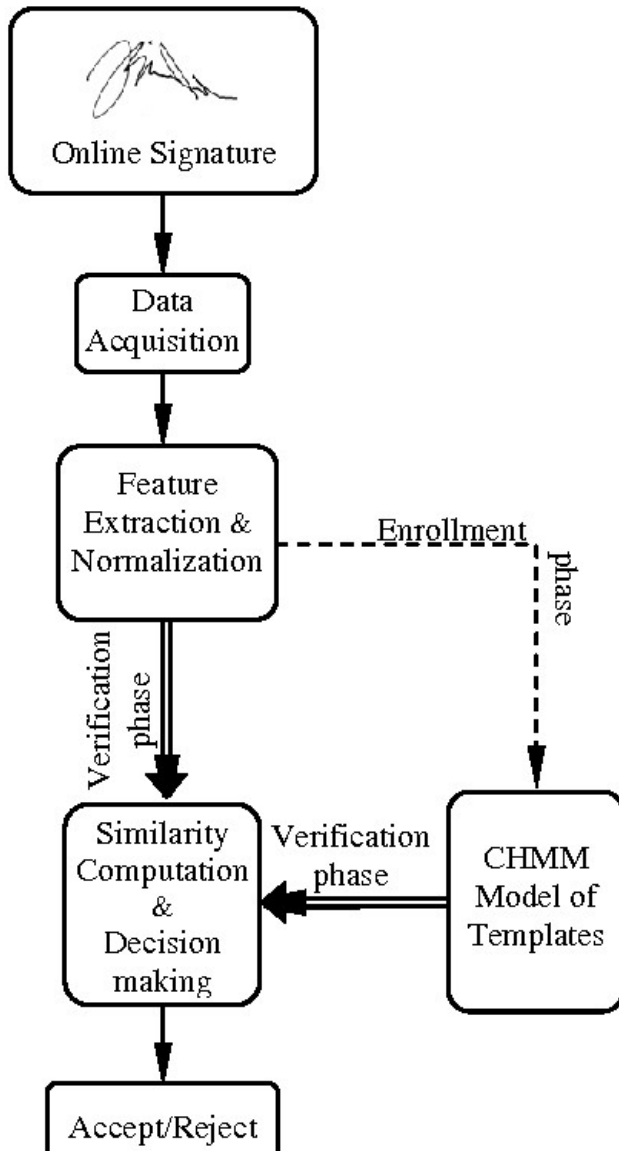
Character Recognition



Handwritten Digit Recognition



Signature Verification





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Terima Kasih

