

License Plate Detector

Using Image Recognition for Car Park Monitoring

SYSTEM’S DESCRIPTION

The AI system, developed for retail store managers and security personnel, uses image recognition technologies like optical character recognition to make parking lot allocation faster and more secure for customers.

BENEFITS

| | Customers | Store | Institutions and Environment |
|---|-------------|-------------|------------------------------|
| Reduction in parking time | <div></div> | <div></div> | <div></div> |
| Reliable calculation of parking time | <div></div> | <div></div> | <div></div> |
| Improvement in the security of the parking area | <div></div> | <div></div> | <div></div> |
| Reduction in the need for human labor at parking points | <div></div> | <div></div> | <div></div> |
| Reduction in the congestion and unauthorized parking | <div></div> | <div></div> | <div></div> |
| | <div></div> | | benefit enjoyed by |

Min.

Limited Risk

High

Unacc.

EU AI Act classification

The system poses limited risk due to its processing of personally identifiable data within non-critical domains

EU AI Act, Annex III

IMPACT ASSESSMENT REPORT

available in multiple formats including Braille



Last update: 28 Feb 2024

RISKS

MITIGATION STRATEGIES

Capability Risks

| | |
|---|--|
| Accidentally capturing images of vehicle’s surroundings | Filtering collected images images to include only licence plates |
| Delays during power and network disruptions | Maintaining traditional parking allocation methods |

Customers
Store
Institutions and Environment

Human Interaction Risks

| | |
|--|---|
| Information imbalance between staff and customers during parking conflicts | Installing interactive screens for customers to access parking rules and check their current parking status |
|--|---|

Systemic Impact

| | |
|--|--|
| Perpetuating the perception of constant surveillance | Automatic deletion of captured license plate images after seven days |
|--|--|

risk faced by

SYSTEM’S DATA

Essential

| | | |
|--------------------------------------|-------------|-------------|
| License plate images | <div></div> | <div></div> |
| Logs with the time of entry and exit | <div></div> | <div></div> |
| | <div></div> | yes |

Potentially employed for future uses personally indetifiable information

PERFORMANCE OF MODELS ON DATA

| Data | Model | Version | Accuracy |
|--------------------------------------|-------------------------|---------|----------|
| License plate images | CNN ¹ -Plate | 3.1 | 97% |
| | CNN ¹ -Digit | 5.1 | 94% |
| Logs with the time of entry and exit | Logistic regression | 8.1.1 | 75% |

¹ Convolutional Neural Network

REPORTING RISKS

Helpline: 0XXX XXX XXX
Reporting portal: report-risk@com
Mail: XX Main Street,
XXX-XXX Contry Z

REGISTERED OFFICE

Name of the company
XX Main Street,
XXX-XXX Contry Z

CERTIFICATES



GDPR Compliant