Watching the World
Data Report

Data

Overview table of raw data sets

Dataset Name	Source	Storage Location
cams	https://webcamaze.engineering.zhaw.ch/ as csv	Saved directly in project (GIT)
result	https://webcamaze.engineering.zhaw.ch/ as csv	Saved directly in project (GIT)

A better and saver storage location would be a DB. We did not make any due to time constraints

Details Dataset 1

Contents of the Data:

- cams.csv: This dataset contains information about the locations of surveillance cameras. It includes data on the geographic locations.
- results.csv: This dataset records the objects detected by these cameras, along with the timestamps of detections, the probabilities of detection accuracy, and the classes of the detected objects. It also includes secondary classification data, which might be derived from different algorithms or models like ImageNet.

Origin of the Data:

- The datasets are available at [ZHAW School of Engineering's Webcamaze Project](#).

Method of Data Collection:

- The data could be collected using automated tools that access live feeds from public cameras, employing object detection algorithms to identify and categorize objects within the camera's field of view.

Purpose and Application:

- The cams.csv data can be used for spatial analysis to understand the distribution of surveillance infrastructure across different regions and its correlation with urban planning, crime rates, or traffic management.

- The results.csv data is useful for analyzing the effectiveness of surveillance systems, understanding patterns in object detection over time and location, and potentially improving the algorithms used for object recognition

Ethical and Privacy Considerations:

-   While using surveillance data, it is crucial to consider ethical implications and privacy concerns, ensuring that all data handling complies with legal standards and respects individual rights.

Data Dictionary Cams

Column Name	Data Type	Description	Example Values
camId	Integer	Unique identifier for each camera	101
loc	String	Text description of camera location	Main St & 3rd Ave
region	String	State or region where the camera is located	California
longitude	Float	Longitude coordinate of the camera	-118.2437
country	String	Country code for where the camera is located	US
latitude	Float	Latitude coordinate of the camera	34.0522
longitude	Float	Longitude coordinate of the camera	-118.2437
postal	String	Postal code where the camera is located	90001
timezone	String	Timezone where the camera is located	America/Los_Angeles
utc_offset	Integer	UTC offset in hours for the location of the camera	-8
country_name	String	Full name of the country where the camera is located	United States
lastSaved	DateTime	Timestamp for the last update to the camera's record	2022-06-01 12:00:00

Data Dictionary Result

Column Name	Data Type	Description	Example Values
camId	Integer	Unique identifier for each camera	101
dateSaved	DateTime	Timestamp when the detection data was recorded	2022-06-01 12:00:00
class	String	The main class of the object detected by the primary model	Person

probability	Float	Probability score for the main detection by the primary model	0.95
classImagenet	String	The class of the object detected by the secondary model (Imagenet)	Automobile
probabilityImagenet	Float	Probability score for the detection by the secondary model	0.88
Idx{object}	Integer	Count of object detected	1