

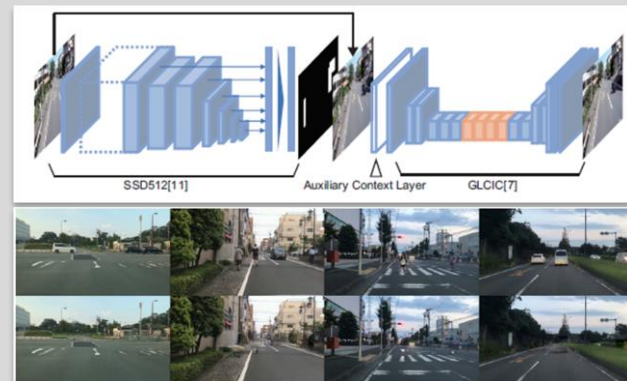
PRIVACY MANAGEMENT

PRIVACY PROTECTED MONITORING AND SENSING

In situations where video data is used in various IoT Smart City applications, personal information is a problem. As one of the solutions, **M-Sec's Privacy Management Functional Group** provides "**GANonymizer**" that automatically removes objects with privacy risk from image data based on advanced deep learning image processing technology.

FEATURES

"**GANonymizer**" consists of two parts of neural networks. In order to detect the target objects from the input image, which might violate the privacy, we adopt the deep neural networks: Single Shot Multibox Detector (SSD). And in order to generating more natural image, we adopt Globally and Locally Consistent Image Completion (GLCIC) which is one of the most successful models in image completion.



KEY BENEFITS

From the viewpoint of privacy protection, it automatically detects and deletes risky targets.

It can process not only still images but also moving images.

The deleted part is automatically repaired with a natural background.

An API is provided so that it can be incorporated in various situations where privacy protection is

SYSTEM REQUIREMENTS

- It is a completely SW solution and can be provided as OSS in the future.
- Especially when performing real-time processing on video, it is necessary to check the processing capacity of the cloud / edge computing environment.

DID YOU KNOW?

Anonymization for privacy protection in image data can be done by methods such as mosaic video, but using "**GANonymizer**" not only erases the object automatically, but also creates a natural background automatically as if the object did not exist.