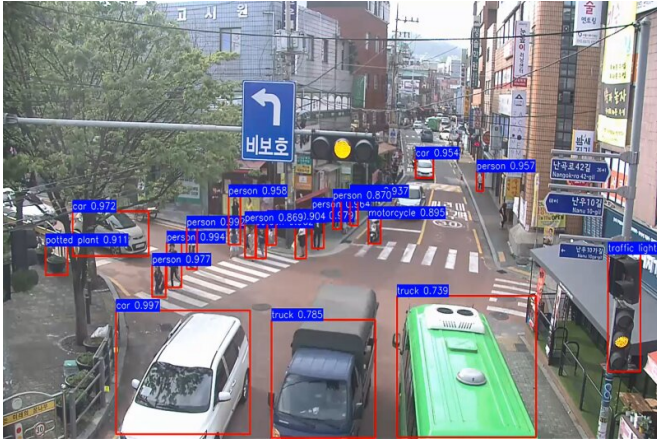


# AI-based visual tech to be applied to CCTV cameras

15 February 2019



The visual artificial intelligence 'Deep View' developed by the research team identifies objects on CCTV's operating screen. Credit: ETRI

A visually based artificial intelligence (AI) technology developed by South Korea's Electronics and Telecommunications Research Institute (ETRI) will be deployed on CCTV cameras for detecting and preventing crimes.

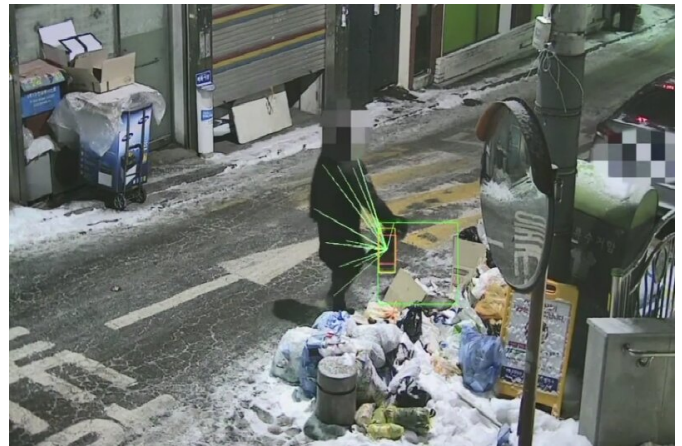
The AI technology Deep View, developed by ETRI, is applied to the precise recognition of human behavior based on analysis of joints of the human body in CCTV images. The technology precisely tracks movements of people placing down or throwing objects, as well as physical indications of such crimes as illegally throwing away garbage. Applying this technology in the future will proactively detect and prevent crimes and incidents in city areas.

So far, there has been much difficulty in recognizing actions appearing in CCTVs, as studies on action comprehension used widely accessible online data such as YouTube videos. As part of efforts to resolve such difficulties, ETRI focused on developing action comprehension

technology that can operate on the actual environment by pulling together necessary requirements and data with local governments.

Using [deep learning](#)-based AI technology, ETRI developed a method to analyze the movements of human joints and moving objects. For example, it can detect patterns of garbage-dumping behaviors via machine learning methods. The research team used deep learning-based recognition technology to detect the locations of passersby, as well.

This new technology is expected to significantly reduce [crime rates](#) by applying visual-based AI [technology](#) on CCTV cameras



The visual artificial intelligence 'dipview' developed by the researchers analyzes the shape of a person's joints in the video and recognizes the scene of dumping trash. Credit: ETRI

Provided by National Research Council of Science & Technology

APA citation: AI-based visual tech to be applied to CCTV cameras (2019, February 15) retrieved 19 January 2021 from <https://techxplore.com/news/2019-02-ai-based-visual-tech-cctv-cameras.html>

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*