

# Discover Network Cameras and Their Metadata

**The technology is a method for identifying internet-connected cameras, including public and closed-circuit television, to statically or dynamically collect associated metadata.**

In 2014, there were an estimated 245 million video surveillance cameras installed globally (HIS Markit). Real-time visual data have many applications. As researchers gain the ability to collect large amounts of visual data about the world, the true potential of data-driven research is recognized. Despite the large amount of publicly available real-time data, there are challenges that inhibit the true potential of analyzing real-time data from these cameras including identifying the cameras either statically or dynamically and identifying camera metadata once identification of individual cameras occurs.

Researchers at Purdue University have developed a method for identifying cameras on the internet; particularly, identifying public and closed circuit television cameras and the metadata associated with each in a static or dynamic manner. Examples of uses include monitoring traffic flow, viewing wildlife, detecting intruders or anomalies, and monitoring weather conditions and emergencies.

## Advantages:

- Allows access to existing network of cameras
- Collects metadata
- Numerous applications

## Potential Applications:

- Security
- Weather information
- Traffic information

## Technology ID

2017-LU-67843

## Category

Artificial Intelligence & Machine Learning/Computer Vision & Image Recognition  
Aerospace & National Security/Defense, Electronics, & Surveillance Technologies

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## View online



-Emergencies

-Machine learning algorithm development

**TRL: 7**

**Intellectual Property:**

Utility Patent, 2017-03-23, United States

CON-Patent, 2019-07-30, United States

**Keywords:** video surveillance, real-time visual data, camera identification, camera metadata, public safety, traffic monitoring, closed circuit television, machine learning algorithm development, data-driven research, internet connected cameras, Big Data, Cameras, Computer Security, Computer Technology, Data, Metadata, Networks, Security, Software