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# 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 & Defense/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