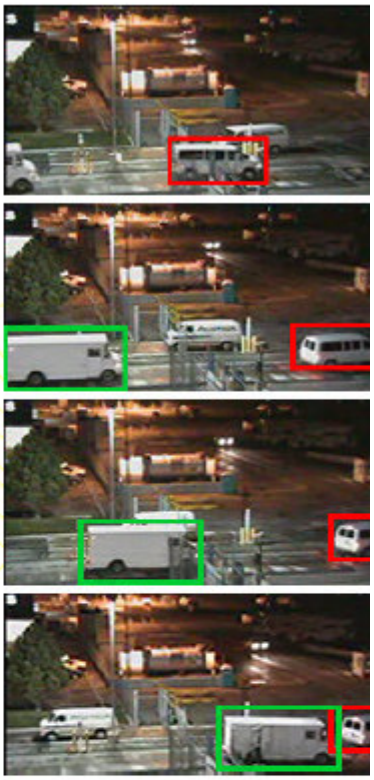
NET RISE

SmartCatch™ | Vehicle/Human Tailgating Technical Specification

Vidient SmartCatch is an accurate and effective solution for detecting suspicious vehicle tailgating at access control areas. Using existing CCTV infrastructure, SmartCatch software monitors, identifies and tracks objects for security policy violations and enables quick response through real-time alerts and instant video replays. At the core of SmartCatch is a set of advanced video algorithms capable of performing complex behavioral analysis, tracking numerous objects and simultaneously identifying security threats in even the most complex environments. Vehicle Tailgating is one of many available SmartCatch behaviors.



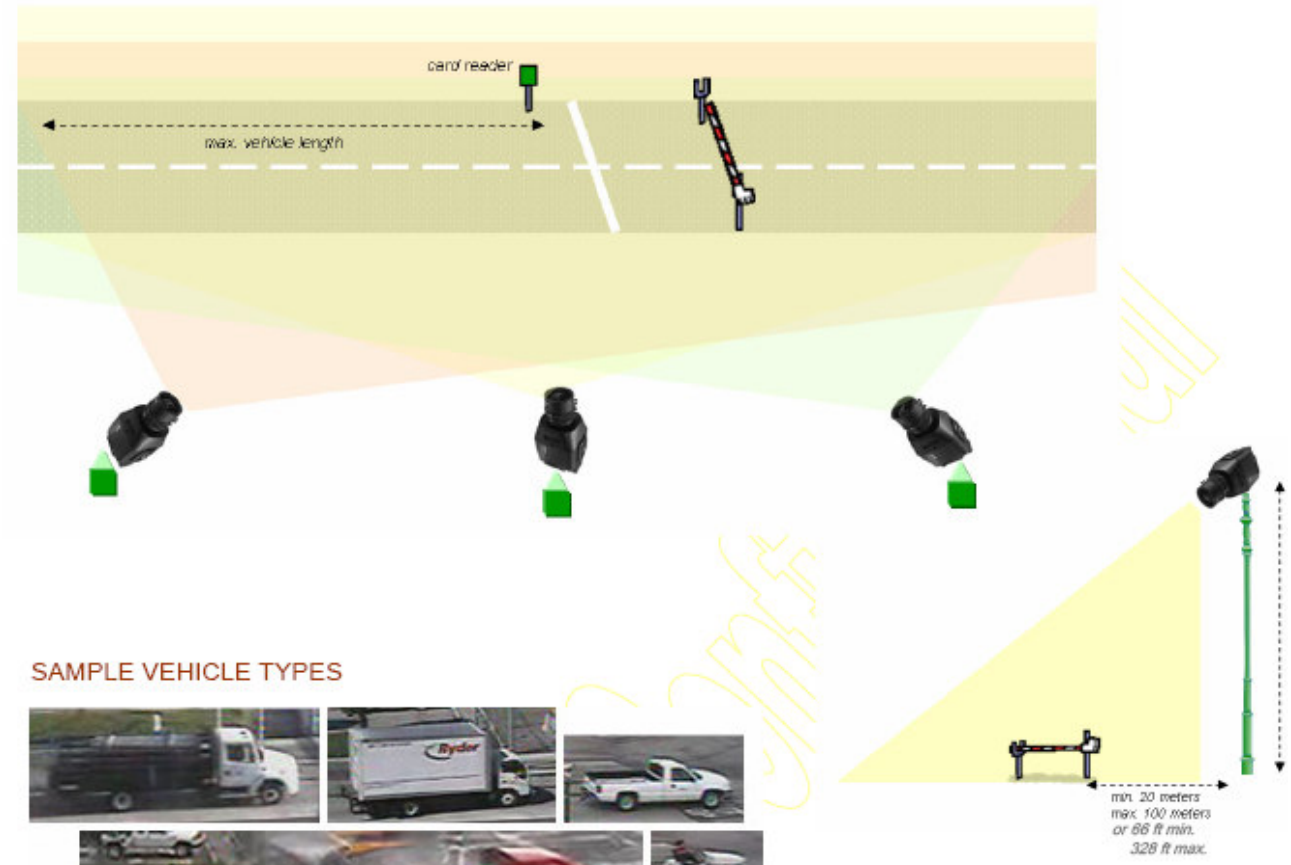
DEFINITION

The vehicle tailgating algorithm detects vehicles from a CCTV camera and tracks their movement through a gate. Tailgating is detected by SmartCatch when two or more vehicles move through a gate within the camera view without the gate fully closing between their entries. Vehicle tracking includes any type of vehicle movement, including stopping, within a camera view range. SmartCatch tracks each vehicle individually in order to detect tailgating, even if multiple vehicles pass through the access gate at the same time.

SPECIFICATIONS

- *General*
  - Type of use: outdoor
  - Maximum number of concurrent Vehicle tracks: unlimited
  - Track human tailgating vehicle thru access gate
  - Input video processing format: CIF, MPEG4
  - Video processing size: 320x240(NTSC) or 352x288(PAL) or higher; High resolutions can also be downsized or cropped to minimum processing size
  - Minimum video size to detect Vehicle: 6x6 pixels (vehicle size) at 320x240
  - Number of access gate per camera: 1
  - Recommended minimum camera distance from access gate: 20 meters with a Standard lens*, as long as the entire vehicle can be viewed before passing through the gate.
  - Recommended maximum camera distance from Vehicle: 100 meters with standard lens*
  - Support camera view from back, front, or side.
- *Software & Hardware*
  - SmartCatch Video Processing Unit(VPU) Software with Windows 2003 Server
  - Minimum hardware: Intel Xeon 2.8GHz, 1Gb RAM, 80 GB HDD
  - Xeon consumption: 40% of Xeon processor per Vehicle tracks
  - Maximum number of cameras with tailgating behavior per Xeon CPU: 2
- *User Configurations*
  - Access gate entry may be defined by a region denoted by rectangles

RECOMMENDED CAMERA POSITIONS



SAMPLE VEHICLE TYPES

VEHICLE TAILGATING CALIBRATION PARAMETERS

- Parameter Frame rate
- Gate configuration map
- Gate open/close time (without integration with access system)