

Map-Based Geolocation of a Camera

Siqura B.V. is located in Gouda and provides advanced video surveillance solutions. These solutions include IP cameras, video encoders, network video recorders, fiber equipment, video management and video-content analysis (VCA) software. Siqura currently provides a number of video-analysis algorithms for surveillance including perimeter intrusion detection, left-luggage detection and people counting.

For the operator of our security products, it is important to know where an object is in the real world. Although we have simple algorithms which can use correspondences between the camera view and the map to compute the overall transform, the camera installer has no access to these tools via the camera's WebApp.

Goals

- Make a web interface which enables the user to geolocate the camera and detected objects using a map of the surroundings.

Tasks

- Implement a web UI, where the user can select correspondences between the camera view and the map if these correspondences are all on the ground plane.
- Implement a UI, where the user can load a map from a maps application to the camera.
- Extend the detections from the VCA applications with GPS coordinates.
- Extend the ground plane correspondence to a mesh-based terrain description.

Keywords and -technologies

- HTML, CSS, JavaScript, AngularJS

Contact information

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