

Geolocation of Multiple Cameras.

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.

In the upcoming years, Siqura will extend its VCA portfolio with multi-sensor solutions in order to increase performance and extend the range. However, to optimally use the installed sensors, the algorithms need to know the relative location of each sensor such that detections from different sensors can be attributed to the same object. We have an apparently good idea on how to register multiple cameras and we would like you to implement it.

Goals

- Develop a method to register two or more cameras/sensors into the same coordinate frame,
- Extension: include thermal cameras, acoustic sensors and

Tasks

- Use standard components to build a multi-camera registration system and evaluate the accuracy with different combinations,
- Optionally, design your own components.

Keywords and -technologies

- Image Processing, Computer Vision, OpenCV
- Additional sensors such as laser scanner, GPS, gyroscope, ...

Contact information

You are invited to send your CV to Anne van Vossen (a.vanvossen@tkhsecurity.com) and Julien Vijverberg (j.vijverberg@tkhsecurity.com).