

OBSERV3D PERSON DETECTION

DESIGNED FOR REAL-TIME SECURITY, RETAIL AND PUBLIC TRANSPORT APPLICATIONS

OVERVIEW

Observ3D person detection is a software solution that automatically detects and tracks pedestrians within a defined monitored area. It is characterized by its robustness and accuracy – even in crowded scenes, which is achieved by asymmetric three-camera stereo configurations for optimized depth range and accuracy. Hence, this core technology enables innovative solutions in many different application domains such as security, retail and public transport. Installation and configuration is straightforward and the system is suitable for indoor and outdoor applications.

APPLICATIONS

- ▶ Queue waiting time analysis
- ▶ People counting
- ▶ Intrusion detection
- ▶ Crowd analysis
- ▶ People flow analysis
- ▶ Statistical reports

KEY FEATURES

- ▶ System output: number of persons detected, 3D position and bounding box of person, live camera views
- ▶ Real-time person detection and tracking
- ▶ Robust detection even in crowded scenes (partial occlusions) due to powerful point cloud analysis and machine learning
- ▶ Automatic ground-plane estimation
- ▶ Single unit monitors large area (10m x 15m)
- ▶ Flexible camera perspective allows operation under various structural conditions
- ▶ Asymmetric 3-camera configurations for optimized depth range and accuracy
- ▶ Highly robust against varying environmental conditions (e.g. rapid changes in lighting situation) by analysis of high quality 3D depth information
- ▶ Functionality is offered as a web service, which allows a distributed concept having analytics and user interface on separate physical machines
- ▶ Easy integration into existing systems due to the RESTful interface using JSON

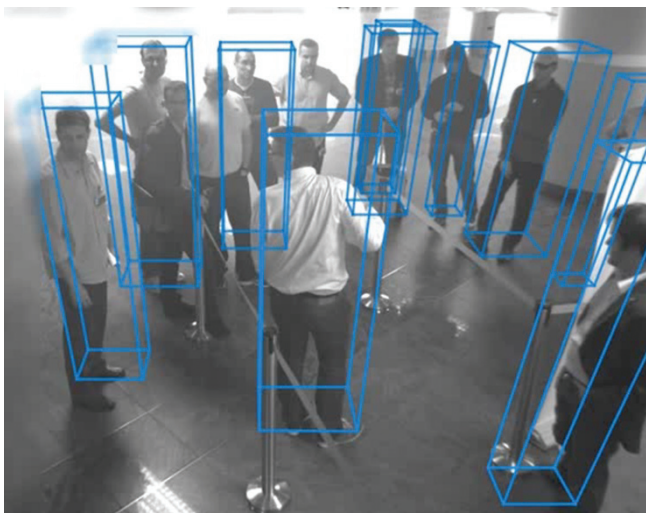


Figure: Example of a person detection result

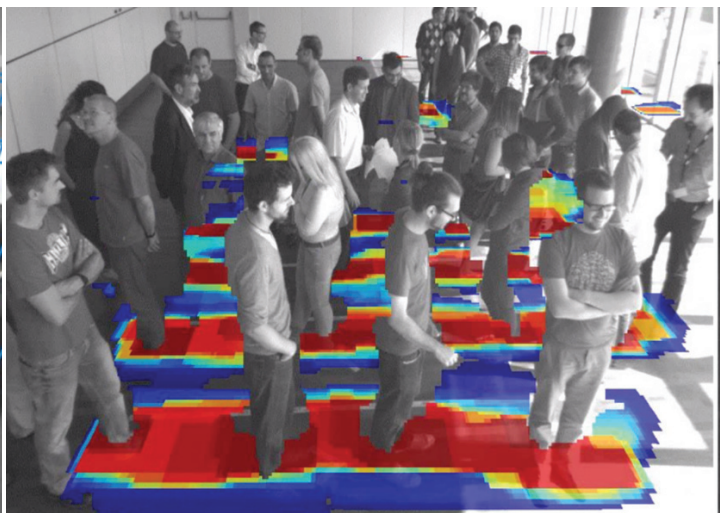


Figure: Statistical analysis based on person detection information

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Figure: Example of a person detection result

REQUIREMENTS

- ▶ Ethernet stereo camera (Gigabit, Power over Ethernet)
 -) mounted above the scene, camera lenses perspective directed to the observed scene
 -) camera mounting height: 2.6 – 4.5 meters
 -) monitoring area up to 10mx15m
- ▶ Operating system: Microsoft Windows 7/8.1 64 bit
- ▶ Manual configuration: region of interest

CONTACT

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