Bachelor-/Masterarbeit

Pixel Classification of Segmented Objects

Extracting moving objects from video sequences is at the core of various vision applications including video surveillance, content-based video coding etc. Background subtraction is one of the most popular algorithms used for moving object segmentation. The segmentation algorithms often erroneously classify a number of background pixels as moving regions.

Two most common misclassifications are shadow and reflections. In the figures below the correct classifications are marked as blue while misclassifications are marked as red.

Frame 174, 232 and 254 of sequence intelligentroom

The goal of this topic is to investigate different post processing methods for object segmentation and develop an efficient pixel classification algorithm suitable for real-time applications.

Requirements: C/C++ programming skills, image processing basic knowledge.

If you have interests in this work, please contact me.

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