1   Review of Sprint 2

Period: 2013-11-04 – 2013-11-18
Est. time: 295 hours. (Roughly 42 hours per person, meetings (6 hours per person) not included.)

1.1   Sprint backlog

The main focus of this sprint is to get a minimal case implementation that meet all requirements in the specification of requirements. The initials of the person responsible for each specific sprint item is shown in boldface in the rightmost column of the table.

1.2   Backlog items from previous sprints

These are the items created in the previous sprint that were carried over directly to this one

1.2.1   Improve foreground segmentation

Both performance and computation time of the foreground segmentation needs to improve in order to make it useful. This item was created during **sprint 1** and is represented in this sprint as item number **10**.

1.2.2   Ground truth labeling

In order to be able to present projects result with some form of performance measurement ground truth data, as well as evaluation code has to be created. This item was created during **sprint 1** and is represented by sprint item number **4**.

1.3   Sprint plan table

Item	Description	Est. time	People
1	Explain and visualize the system design and how to continue building on it. The explanation is to be published on the group Github pages.	12	**NW**, MT
2	Installation/Configuration GUI. Adds possibility to set what image regions should be excluded from the image processing, where do people leave/enter the image plane.	20	**AS**, MT
3	Gather test data from realistic environments (e.g. CYD-poolen) and label these.	10	**EF**, AS
4	Add net flow estimation to the statistics module.	4	**EF**, MR
5	Make the system more robust against illumination. OpenCV settings? Better background model. Shut down dynamic exposure/gain in camera? normalized pixels? (make the system entirely intensity independent.)	32	**MT**, MS
6	Handle people standing still. (Worst case: rewrite background model. Best case: feed OpenCV with a bit mask.)	32	**EF**, AS
7	Add queue detection (Requires **6**)	32	**NW**, GH
8	Gather more information about methods from different computer vision papers.	4 each	All
9	Simple classifier of humans from above.	32	**NW**, GH
10	Improve foreground segmentation, allowing more precise people detection, especially when people are close together.	24	**GH**, MR
11	More sophisticated error measurement for how probable it is that a previous object and a current one are the same.	10	**NW**, MT
12	Use a video stream that is in real time from a camera as input to the system	20	**MS**, AS
13	Update and "renegotiate" requirement specification (Power over ethernet camera no longer an option.)	5	**MR**, MS
14	Handle one camera over each door to the same room and keep a consistent count of hte number of people in the room (Net flow estimation upgrade, making **4** work using several cameras.)	6	**EF**, MR
15	Handle multiple video files as separate cameras.	4	**MS**
16	Collect 3D data set. One set viewing a room with people moving and another with one camera above the door and an other looking towards the door.	8	**EF**, MR
17	Create system for labeling and reading ground truth of people count. (in/out)	24	**MR**, MS
18	Finalize the sprint review of sprint 1 and plan of sprint 2 (this docuement and submit these to the supervisor.)	4	**MS**

1.4   Result

General comments about the result go here

1.5   Sprint result table

Item	Result	Time Spent	People
1	Results regarding this specific item	hours	Involved members

1.6   New Backlog Items

General info about new backlog items created as a result of this sprint go here.

1.6.1   New backlog Item 1

More detailed info about this specific item and why it was added to the backlog.