SensFloor® Gait User Manual

1 General Information

SensFloor Gait is a web-application running in the browser. When shipped on a Future-Shape SE10 receiver, the app is to be found at the URL http://192.168.5.5:4300 when connected to the receivers WiFi. As of the writing of this document the best compatibility is given with the Google Chrome browser. If the system is integrated into a network via ethernet cable, the application is reachable using the receivers IP-address with the port 4300 appended to the address, similar to the example given earlier.

The interface language including the date formatting can be changed using the buttons on the left side of the footer. This setting will be stored in a cookie.

The sidebars can be hidden using the grey button denoted with > or < respectively to allow for a bigger central viewing area increasing readability. Clicking our touching the central area outside a report will hide both sidebars.

On mobile devices the participant and record lists in the left sidebar will be displayed as selections fields using the devices specific interaction design. This leads to the lists only being visible upon activation of the field.

Should a page refresh be required this can be performed by clicking/touching the central header.

2 Quick Overview

2.1 Creating a recording

- Optional: Register participant if not present
- Pick a participant
- Press “Start recording”
- Have participant walk along the gait path
- Press “Stop recording”
- Optional: analysis of the recording (can be performed at a later point in time)

3 Details

3.1 Registration of a new participant

With this button a new participant can be registered. Upon activation a dialogue field will open, where data pertaining the participant can be entered. Entry of data in the first name field is mandatory every other field is optional. If privacy is a concern the field can also be filled with another identification or pseudonym. After confirmation of the dialogue the participant is registered and from now on available in the list of participants.

3.2 Choose a participant

To choose a participant the appropriate entry has to be selected in the list of participants in the upper left sidebar. Using the textbox it is possible to filter the list the list is being updated with each keystroke.

3.3 Deselecting a participant

Using the symbol on the left of the central participant header or by deselecting the entry in the participant list a participant can be deselected.

3.4 Removal of a participant

A currently selected participant can be permanently removed with the button in the participant header.

3.5 Edit participant information

In the upper part of the right sidebar where the general participant information is displayed by clicking an entry a dialogue field opens. This allows the editing of the general information. This can also be used to add or remove additional information.

3.6 Starting a recording

Recording can only be started if a single participant is selected. If more than one participants are selected the “Start recording” button is deactivated.

If a recording is possible the button on the bottom of the central area is active. By selecting this button the appropriate action is executed. The button changes it’s color during this to show its function and the current recording state.

- Green : No recording running; Clicking start new recording
- Red: Recording active; Clicking stops recording
- Yellow: App is currently saving finished recording

3.7 Remove a recording

A recording can be removed by activating the button in the corresponding recording frame in the central area.

3.8 Display & analysis of recordings

On selection of a participant the corresponding list of recordings is loaded and subsequently displayed in the lower left sidebar under the label “Recordings”. The selection of multiple recordings is possible.

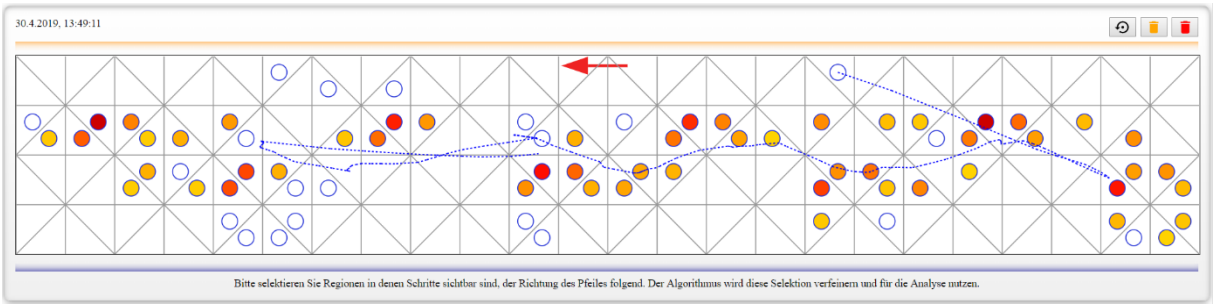

Figure 1: Representation of a not yet analyzed recording

Figure 1 shows a visual representation of the recorded data. The color of the dots designates the recorded capacitance with an increase being shown by an increasing shift towards the color red. This can be used to estimate the general location of the steps taken.

In this state clicking the graphics sets step positions. This has to be done in order and following the movement direction shown by the arrow. The estimated positions for steps are shown by the green circles in

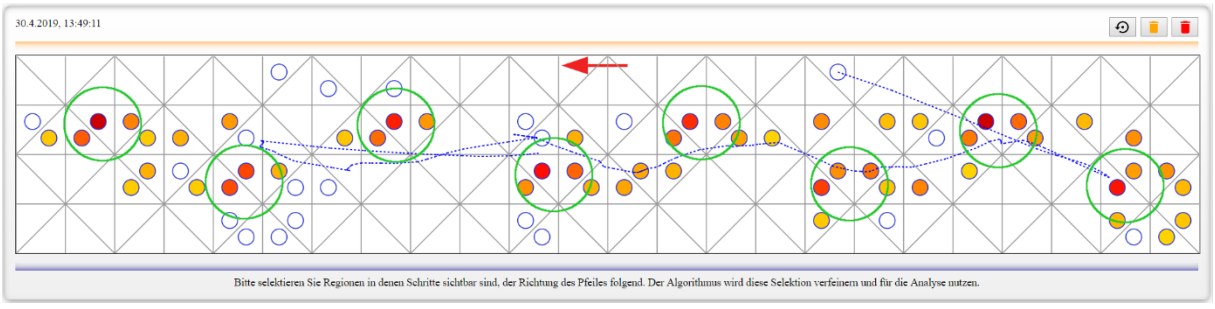

Figure 2: Probable step areas

Figure 2. Should a step be misplaced the button can be used to undo the last step. When activating the “Analyze data” button these positions will be used as rough starting positions and further refined and then used to extract the gait parameters. After a short moment the graphic will be reloaded and should look like

Figure 3. Should it become apparent that in the previous step some locations were set incorrectly the step input and the analysis can be reset with the button. Using the “Show parameters” the table containing the parameters will be shown.

3.9 Customizing the graphical display

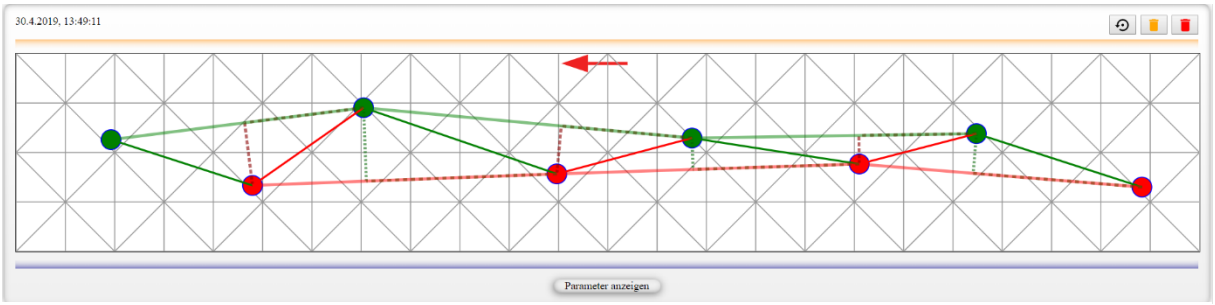

Figure 3: Analyzed graph showing step and stride lengths and widths

The displayed elements can be switched on or off and color and size varied with the “Graphic Options” menu in the lower right sidebar. An exception to this are the maximum sensor activity and the walking direction in the non-analyzed graphic to allow correct step placement. These settings will be saved alongside the interface language in a cookie.

3.10 Exporting the analysis

Using the button in the participant header it is possible to view the parameters of the currently selected and analyzed recordings in a table. In the header of the newly opened report it is possible to select PDF or CSV as export for the data.

Using the button in the recording header the corresponding recording (including graphics, parameters and additional Information) can be printed. Using it is possible to add information to each recording.

3.11 Filtering the floor data

Using the button on the bottom right it is possible to remove floor modules from the data-collection if the need for this arises. The grid shows a representation of the floor including current activity in light red. By selecting a field the filter is activated and the field shown in dark red.

It is also possible to reload the floorplan. Only use this function on suggestion by the support.

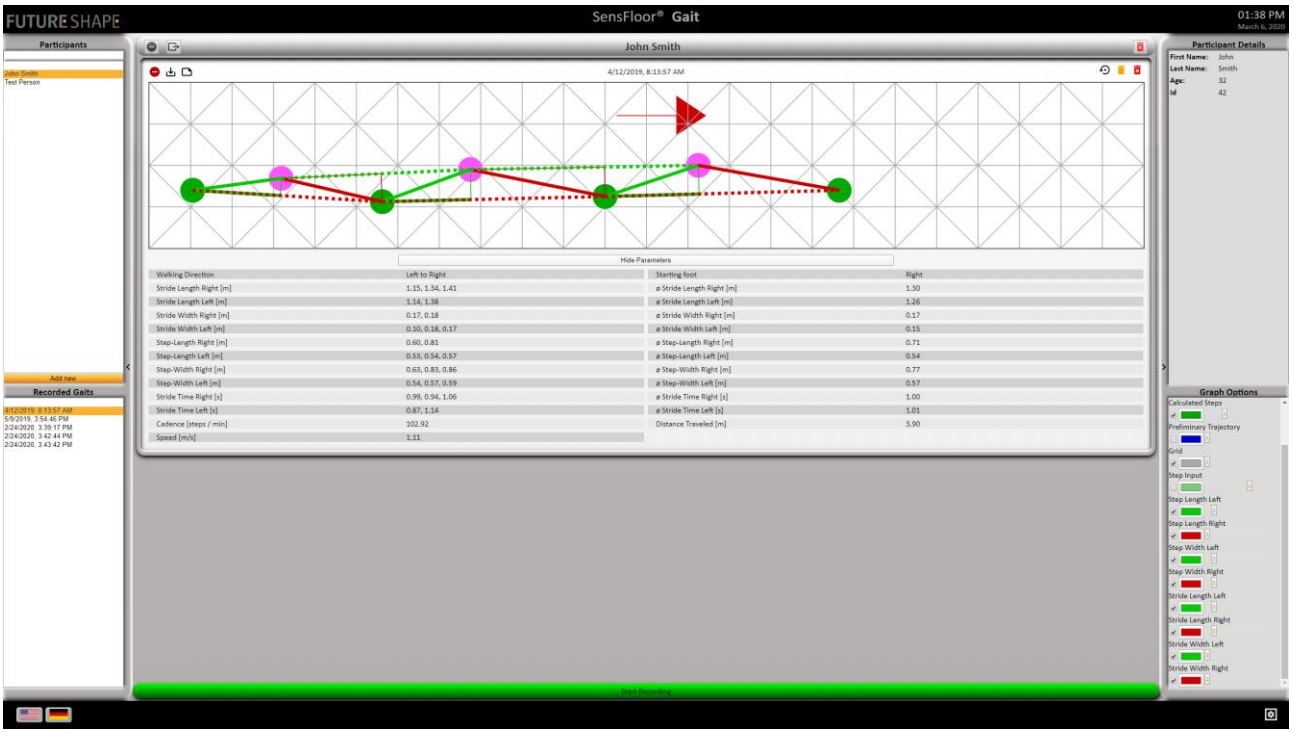

Figure 4: Overview