Social Signal Interpretation XML Tutorial

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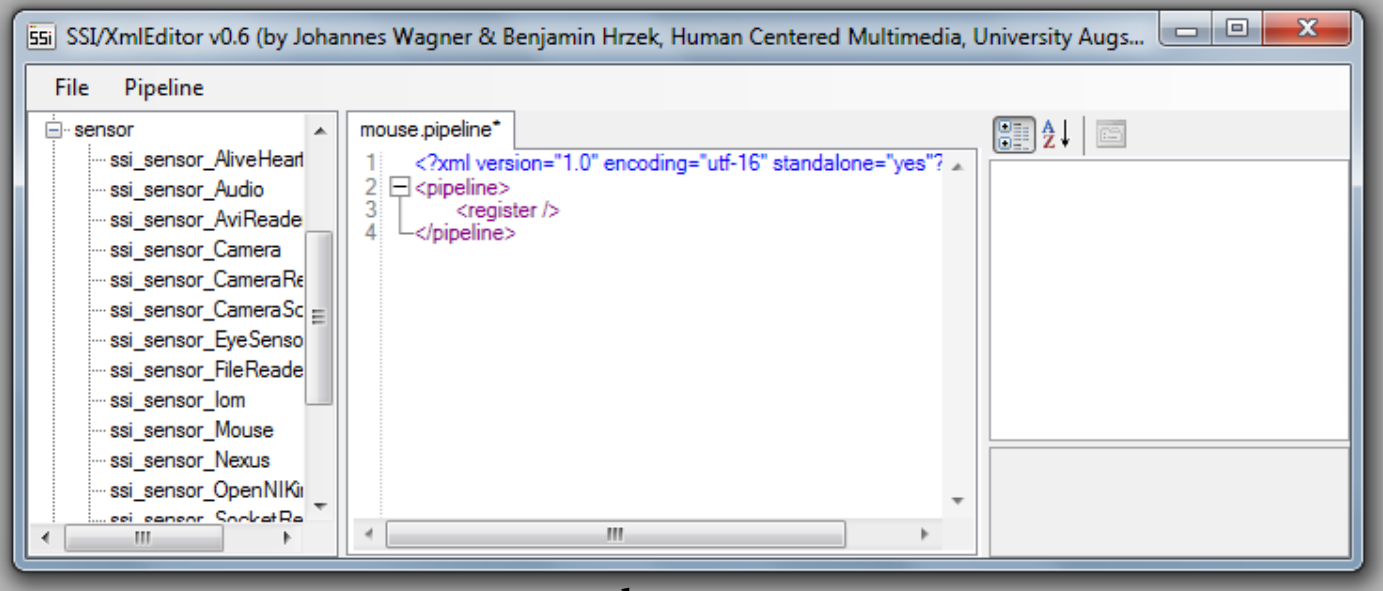
(last update: 16.01.13)

http://openssi.net

XML Editor

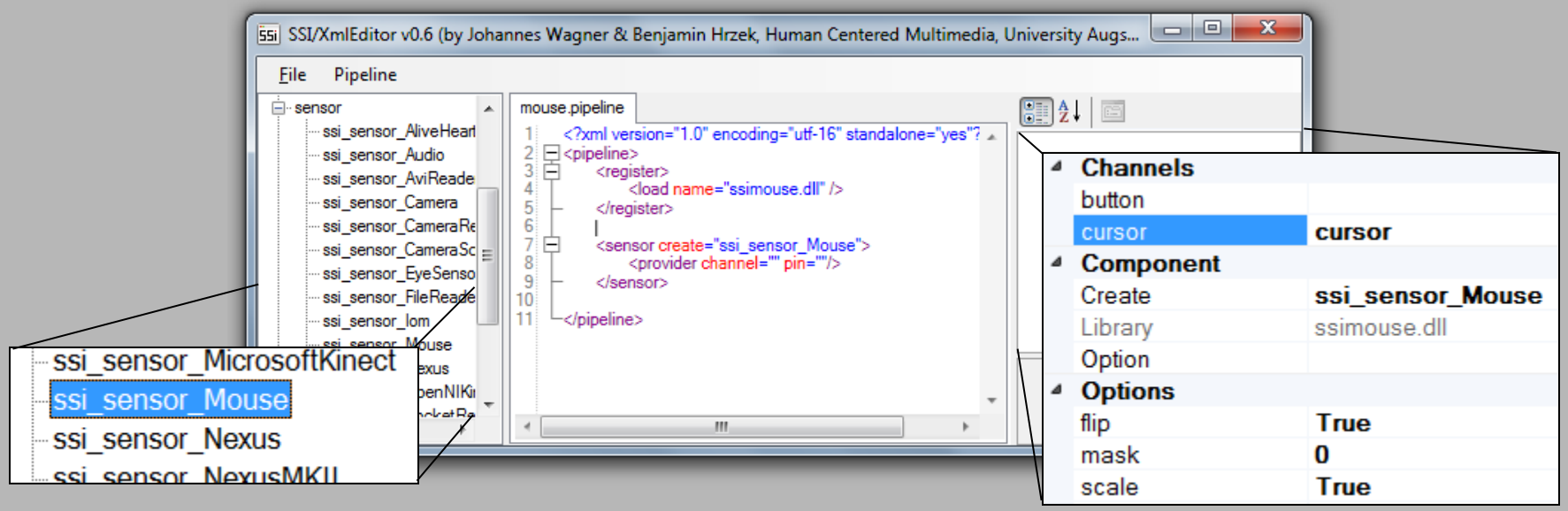
- Start bin/<Win32|x64>/vc10/xmledit.exe
- Create a new pipeline (File>New) and save it (File->Save), e.g. mouse.pipeline



components editor properties

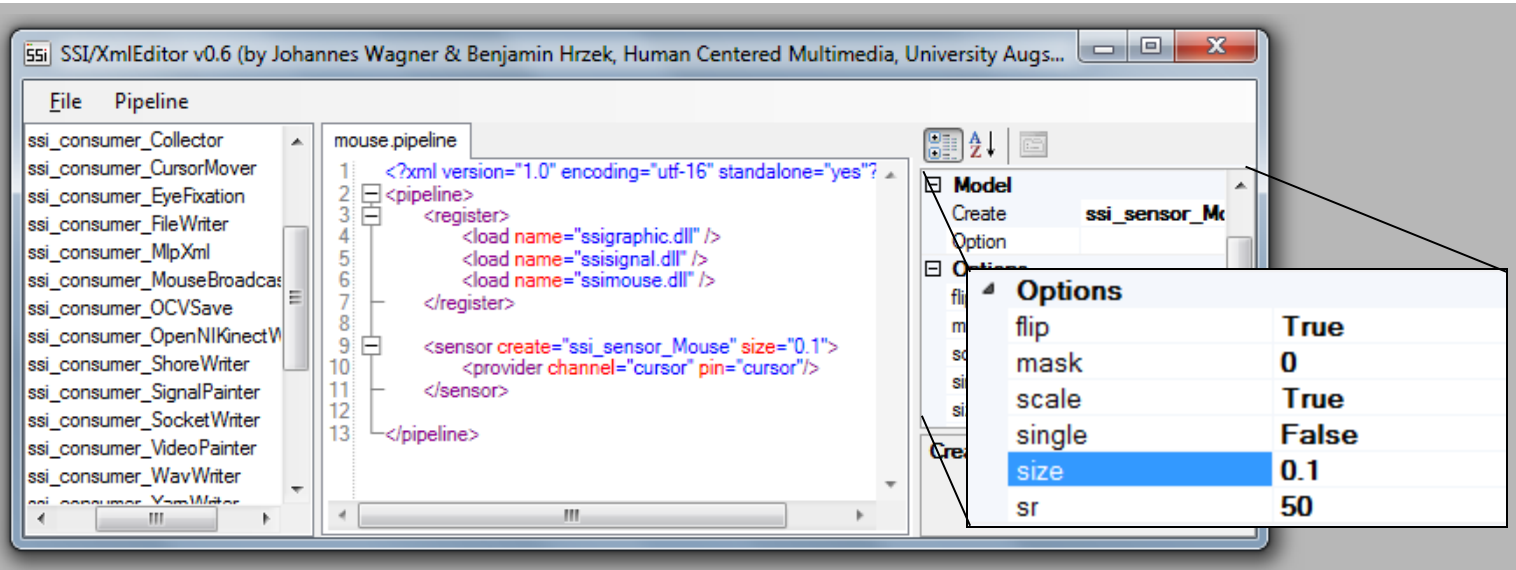
Provider

- Within the component panel expand the sensor-tree and double click ssi_sensor_Mouse
- Place cursor in line <sensor… to display the properties
- Below Channels add a pin-name to cursor (e.g. also cursor)
- Input components can now receive the cursor stream via the pin-name



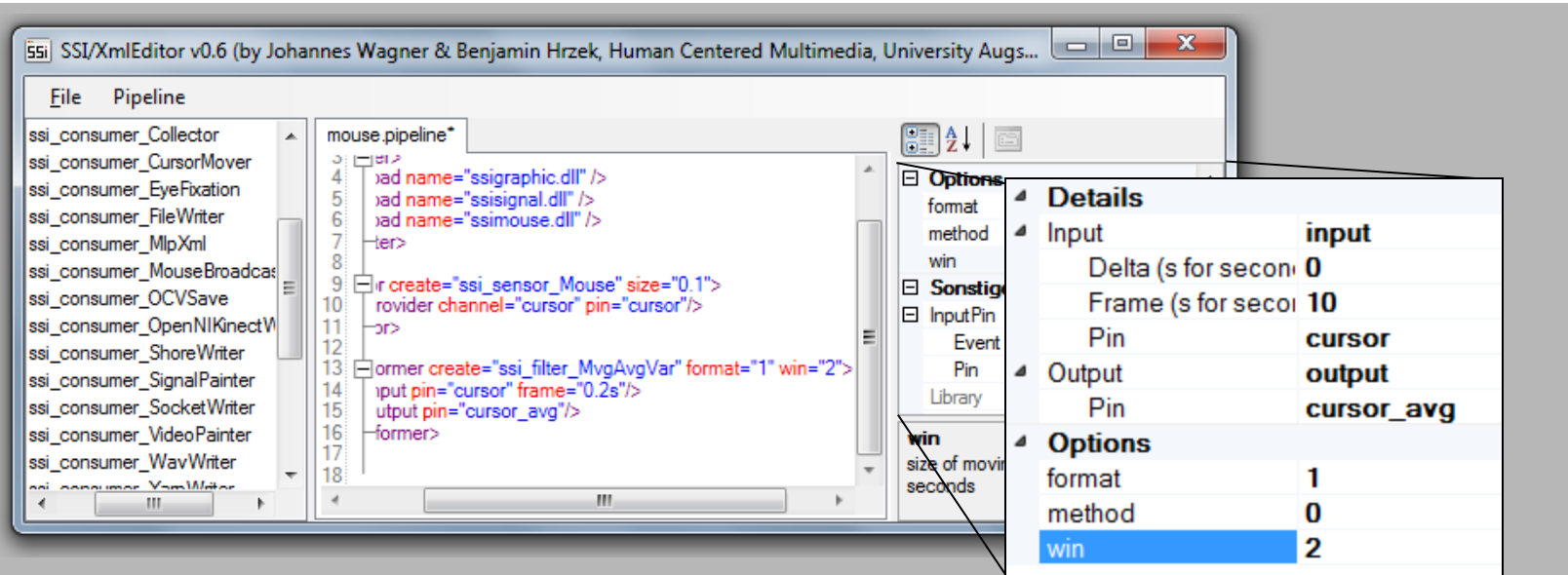
Optionen

- Below the category Channels you find options specific to the component
- Additional information to a selected option is displayed at the bottom of the panel
- Change option size to 0.1



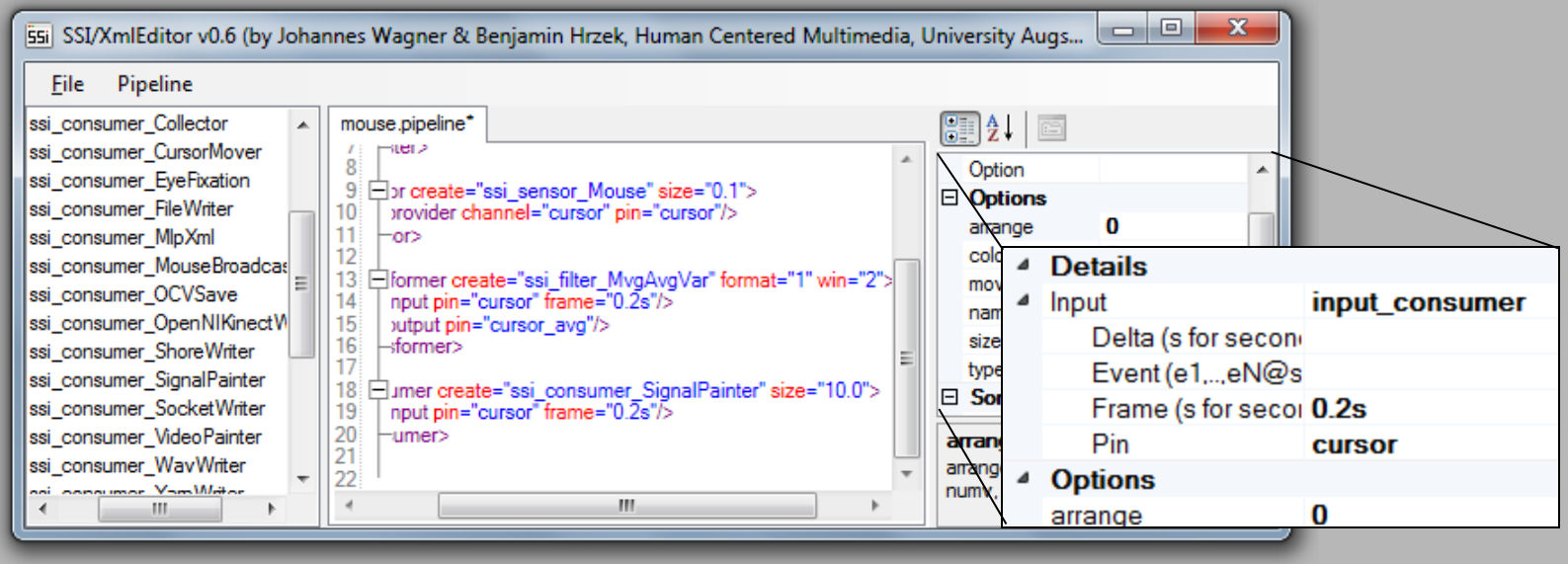
Transformer

- Place cursor after </sensor> and insert a MvgAvgVar Filter (available from the transformer tree)
- In the properties panel set the input pin to cursor and choose a name for the output pin (here cursor_avg)
- Set frame size either by samples per second (e.g. "10") or in seconds (z.B. "0.2s“)
- Set options format to 1 and win to 2



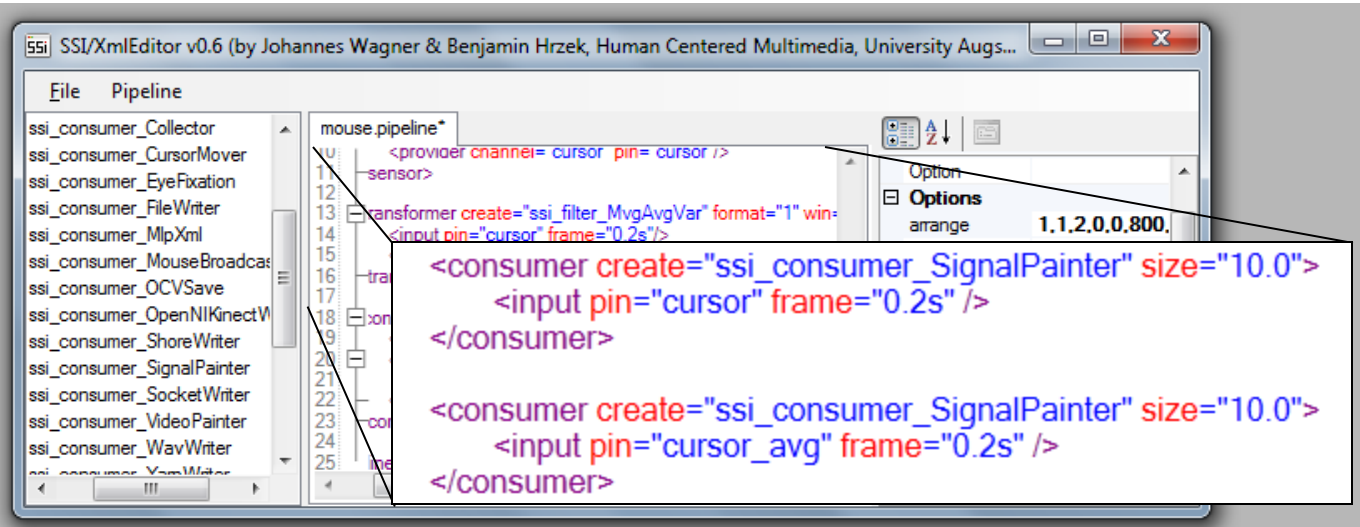
Consumer

- Place cursor after </transformer> and add a SignalPainter consumer
- Set input pin to cursor and choose a frame size (e.g. 0.2s)
- Set option size to 10.0
- Execute pipeline by pressing F5



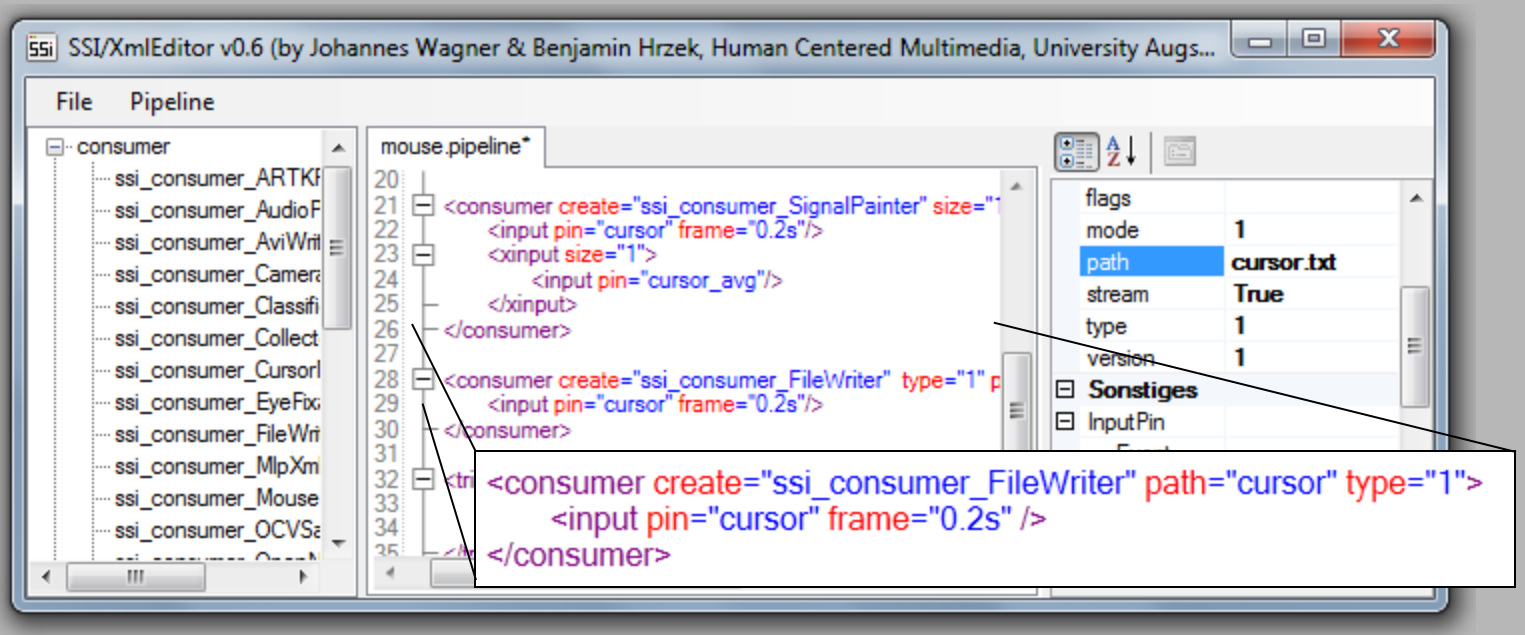
Consumer

- To compare the raw cursor signal with its manipulated version either insert another SignalPainter consumer with input pin cursor_avg.
- Set option arrange to 1,1,2,0,0,400,600



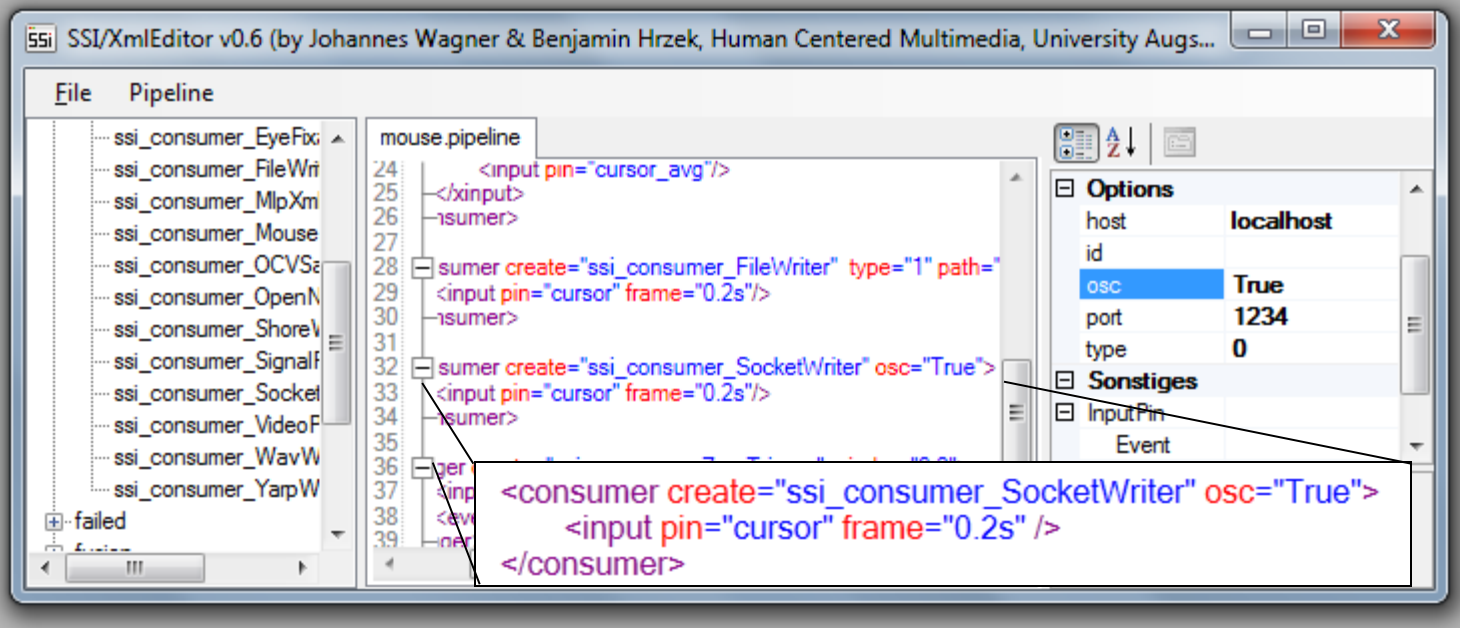
File

- To store cursor signal to disk add a FileWriter consumer and set once more the pin and frame property
- Use option path to set a file path and change mode to 1 (=ASCII)
- When you run the pipeline again the cursor signal will be stored in files cursor.stream and cursor.stream~



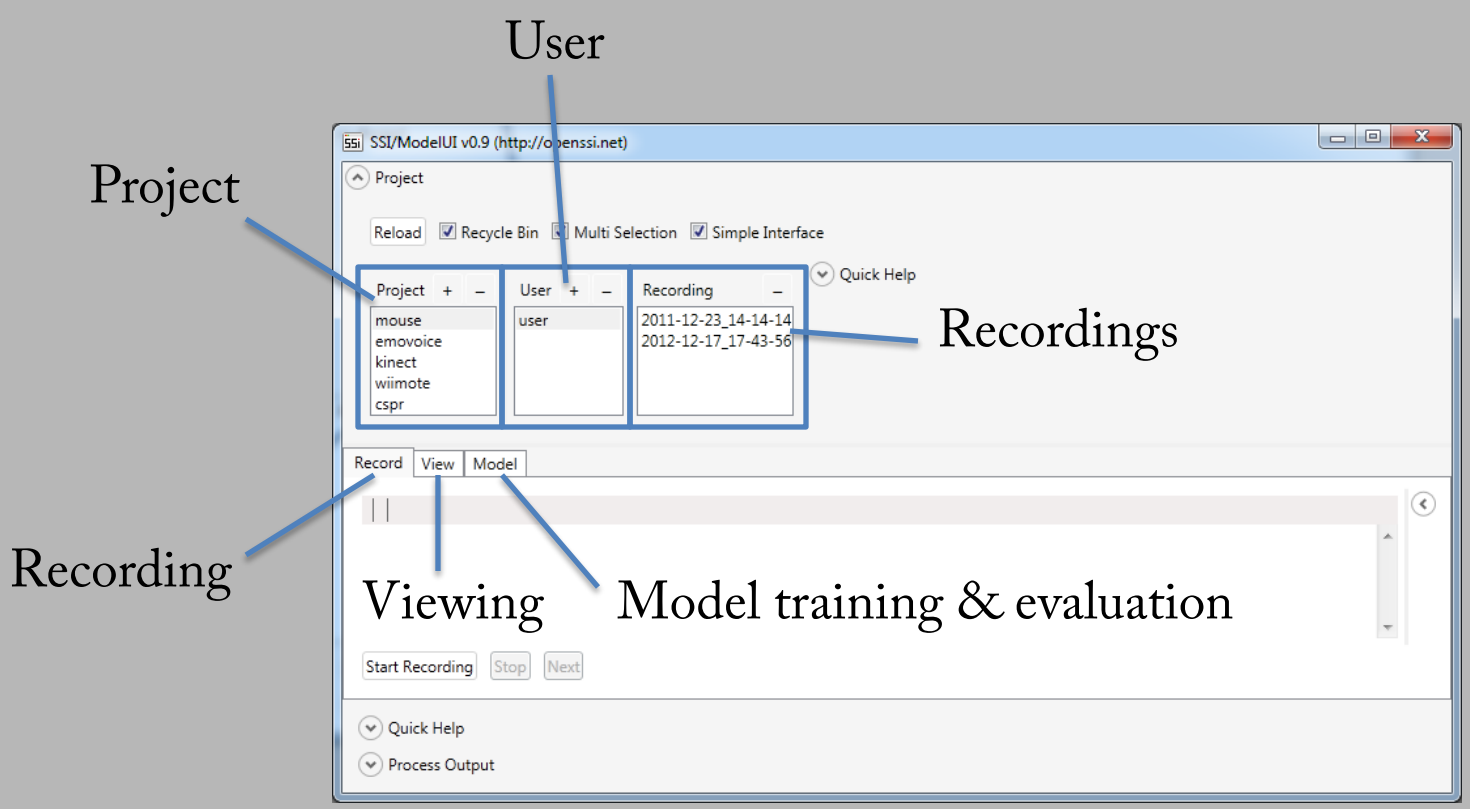
Socket

- To stream the cursor signal through a socket insert a SocketWriter consumer and set option osc to True
- Start pipeline and run the following command on the command line: <root>\[Win32|x64]\vc10\bin\sockspy.exe --osc -console 1234



ModelUI

- Start <root>\[Win32|x64]\vc10\bin\modelui.exe and select project mouse

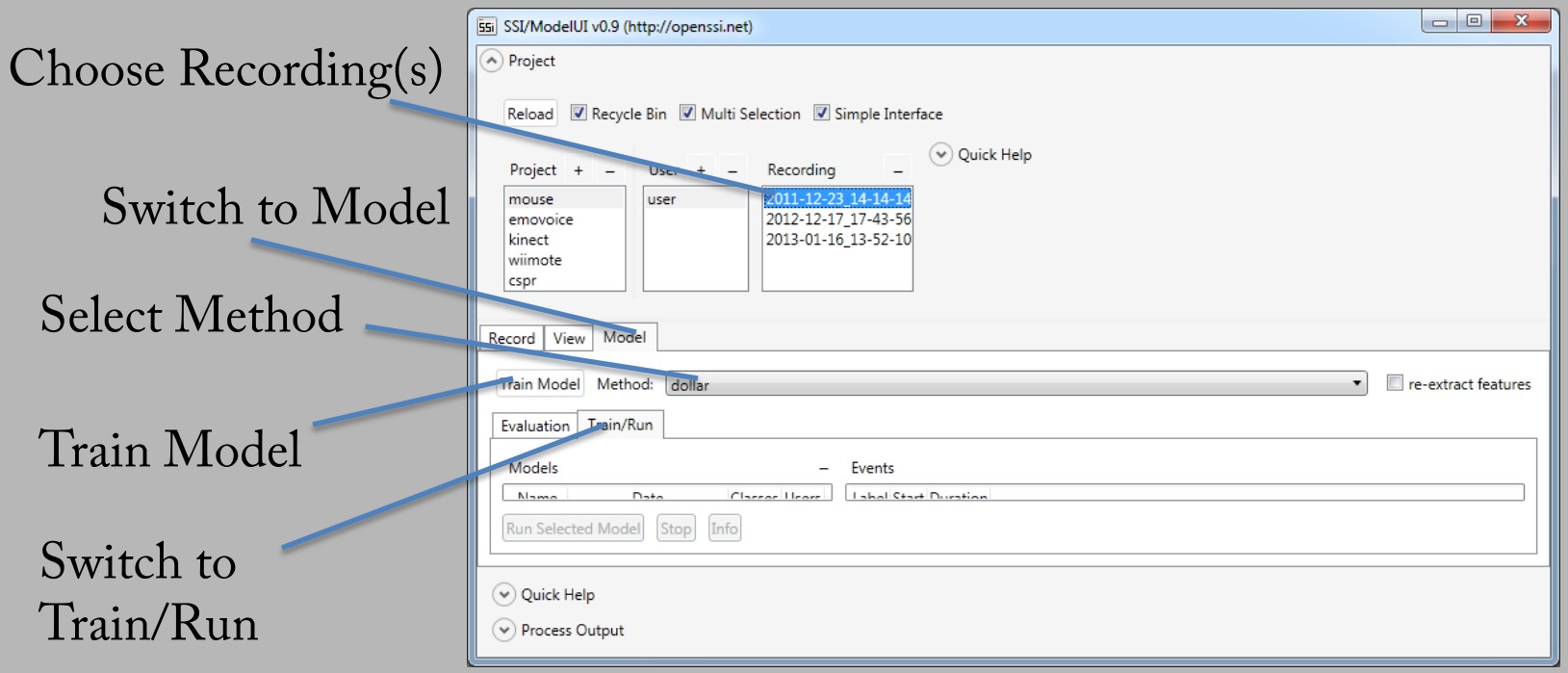


ModelUI

- Select user and click Start Recording in record panel
- Follow instructions on screen
- Draw inside the GUI by holding the left mouse button pressed

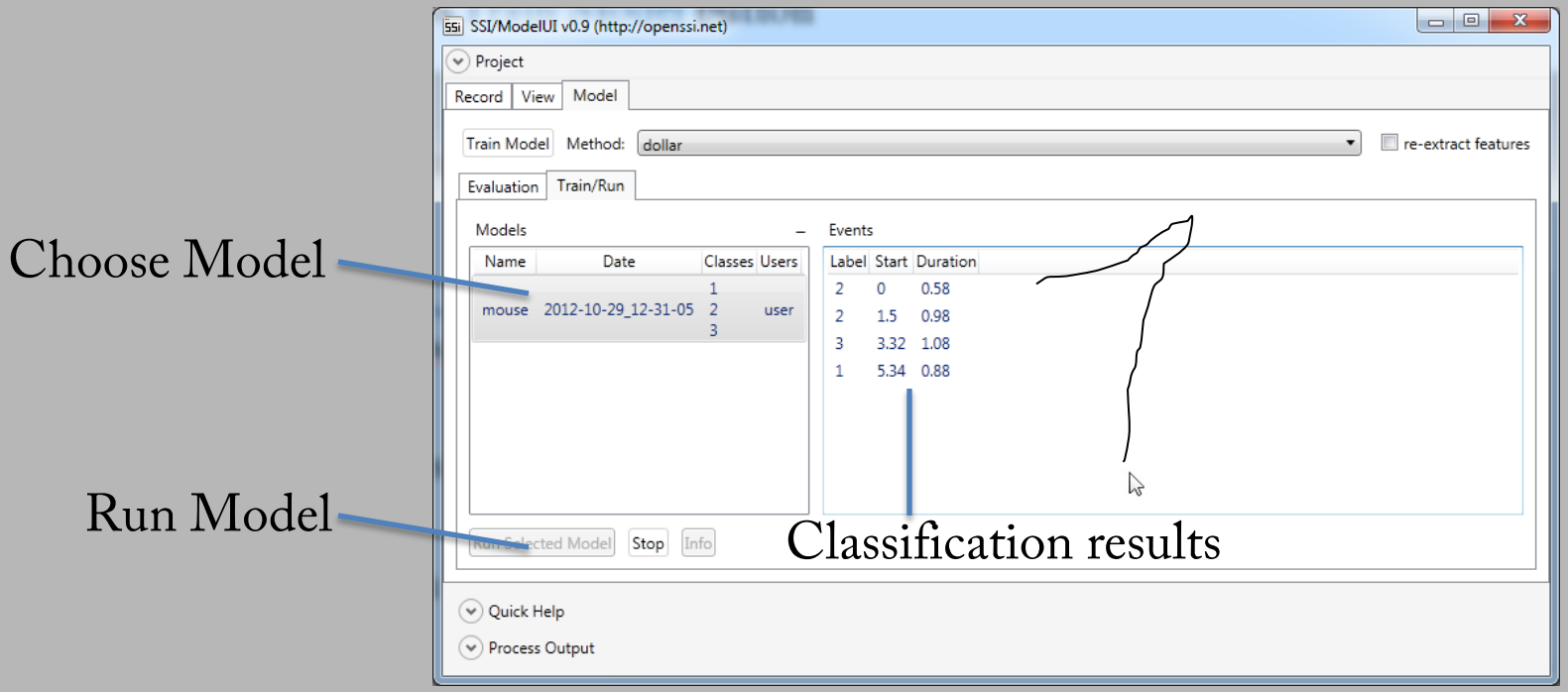
ModelUI

- Switch to Model panel and switch to Train/Run
- Select one or more recordings (by holding the Strg key)
- Select dollar as traning method panel
- Press Train Model button



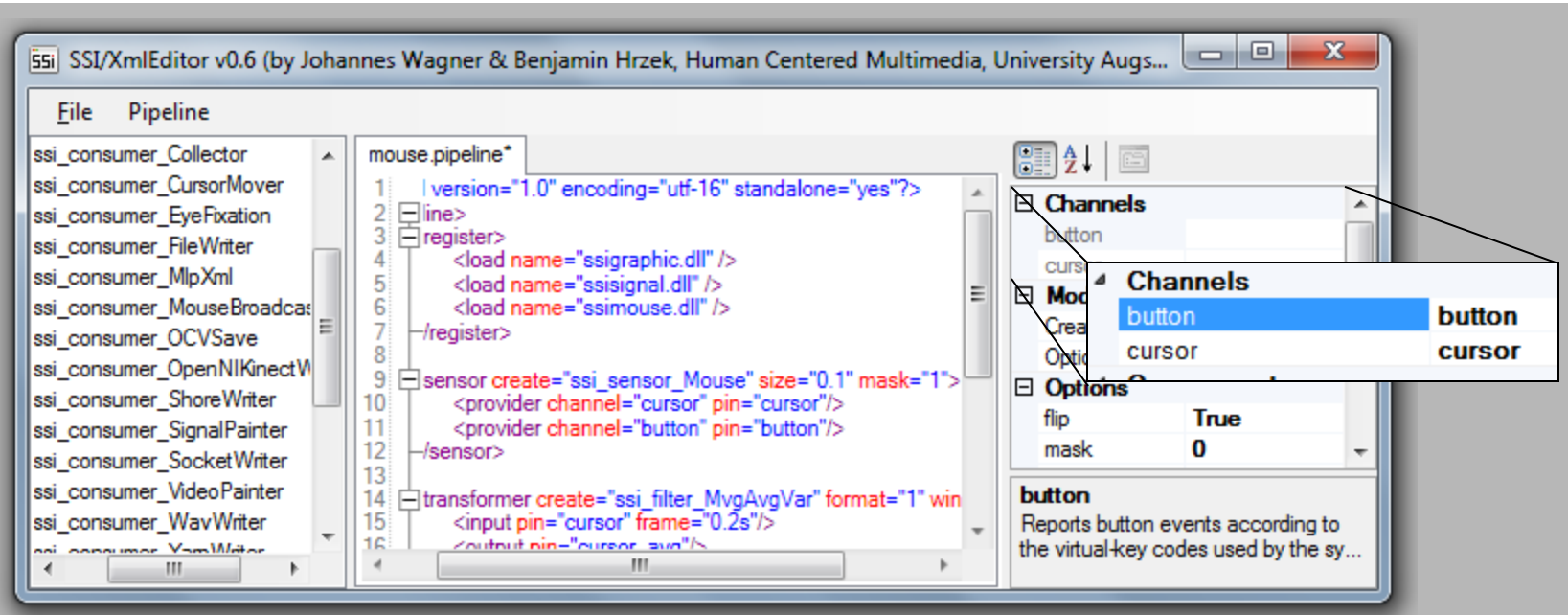
ModelUI

- Select the trained model and click Run Selected Model
- Draw inside the GUI by holding the left mouse button pressed



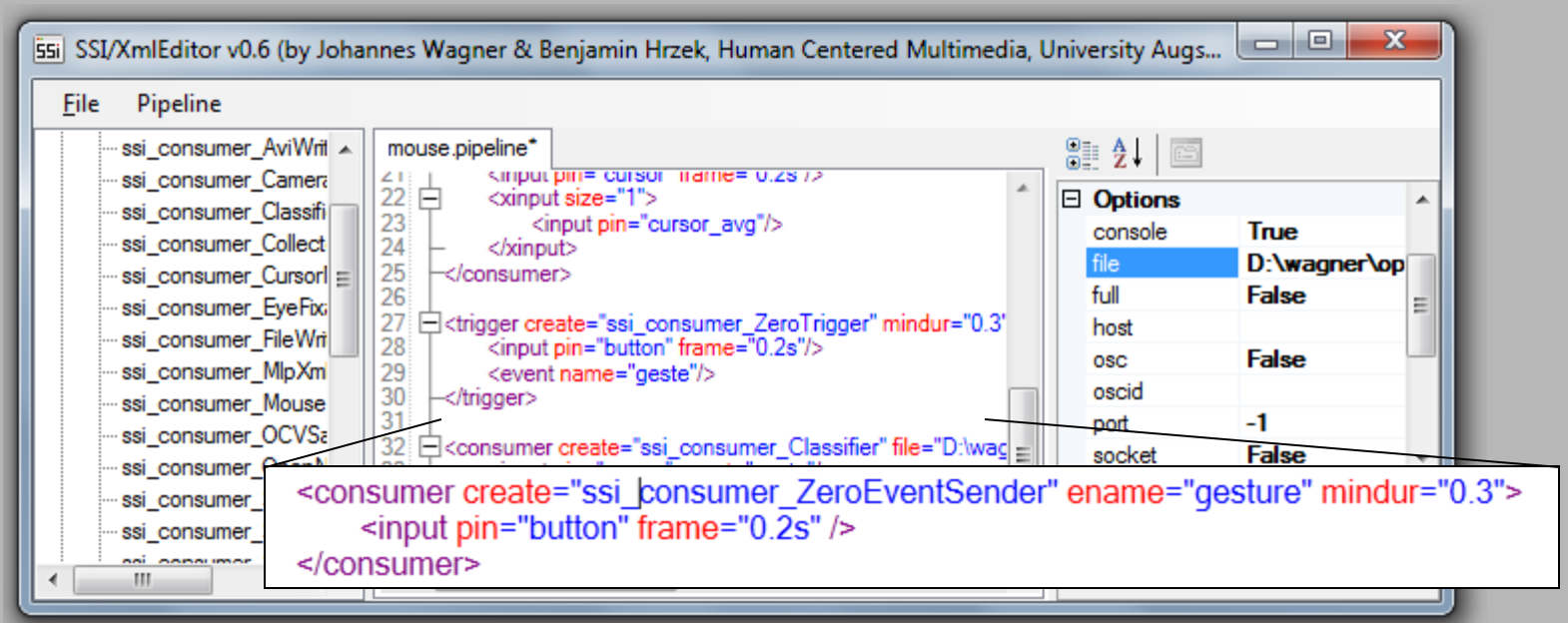
Provider

- Switch back to the editor and place the cursor again in the <sensor… line
- Set mask of mouse sensor to 1 and activate second provider by putting a name to the button channel name (e.g. button)



Trigger

- Add a new consumer ZeroEventSender with input pin button and a frame size of 0.2s
- Input an event name by setting option ename (e.g. gesture) and set option mindur to 0.3



Classifier

- Insert a consumer of type Classifier and set input to cursor
- Instead of a frame size set gesture@ as Event name
- As option trainer set the path of the previously trained model (e.g.: <root>\model\mouse\train\2011-07-20_07-57-53\mouse) to complete your online classifier