SSI Sensor Overview

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contributors to this overview:

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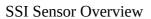
List of devices / plugins sorted by their monitoring capabilities and sensors:

what to monitor	sensor	device / SSI plugin
human sounds	microphone	audio input device
		Android smartphone / tablet
		Windows tablet
movement, position of body (parts)	accelerometer	Android smartphone / tablet
		Xsens MVN Biomech
		Wiimote
		Smartex (body)
		Empatica
		WAX9*
		Windows tablet
	gyroscope	android smartphone / tablet
		Xsens MVN Biomech
		WAX9*
		Windows tablet
	magnetometer	android smartphone / tablet
		Xsens MVN Biomech
		Emotiv (head)
		WAX9*
		Windows tablet
	camera	Android smartphone / tablet
		video input device
		Kinect
	depth sensor	Kinect
		Leap (hand, fingers)
	barometric pressure sensor	Xsens MVN Biomech
		Android smartphone / tablet
		WAX9*
	mechanical pressure sensor	SensingTex pressure mat
		Wii Balance Board
	simple optical sensor	mouse (hand)
	capacitive sensor	Microsoft Touch Mouse (hand)
body position (global)	GPS, Galileo, Glonass	Android smartphone / tablet

	Cell tower positions	(Google Location service: uses fusion of GPS, cell towers and Wifi)
	Public Wifi positions	
	barometric pressure sensor	
	iBeacon	beacon scanner (indoor location)
facial expressions	camera	Android smartphone / tablet
		video input device
	depth sensor	Kinect
eye movement / gaze	eyetracker (camera)	The eye tribe (stationary)
		SMI Red (stationary)
		SMI Eye Tracking Glasses
	EOG sensor	Nexus-10 MkII
heart rate	blood volume pulse sensor	e-Health
heart rate + heart rate variability	PPG sensor	Empatica
	blood volume pulse sensor	IOM
		Nexus-10 MkII
	ECG sensor	aliveCor heart rate monitor
		e-Health
		Nexus-10 MkII
		Smartex
respiration	chest / belly band	Nexus-10 MkII
		Smartex
	airflow sensor	e-Health
skin conductance	skin conductivity sensor	IOM
		e-Health
		Nexus-10 MkII
		Empatica
skin temperature	temperature sensor	e-Health
		Empatica
		WAX9* (with arm band)
blood oxygen saturation	S_PO_2 sensor	e-Health
brain activity	EEG sensor	Emotiv
		Nexus-10 MkII
muscle activity	EMG sensor	Nexus-10 MkII
		e-Health

	4 / 5	Myo

* not all features implemented yet!

List of devices:

- aliveCor heart rate monitor
- Android devices
- e-Health
- Emotiv
- Empatica
- iBeacon
- IOM
- Kinect
- Leap
- Microsoft Touch Mouse
- Myo
- Nexus-10 MkII
- SensingTex
- Smartex
- SMI Eye Tracking Glasses
- SMI Red
- The eye tribe
- WAX9
- Wii Balance Board
- Wiimote
- Windows x86 tablets
- Xsens