



Pharus

- LiDAR Tracking Software from Ars Electronica
- sends out one ID per person via OSC with x-pos, y-pos, acc, dir

Gyroscopes

- each performer gets 2-4 gyroscopes attached to hands (and feed)
- the gyros sends their data via WIFI as OSC
 - roll pitch yaw
 - or quaternions

Tracking

- Combines Pharus IDs and gyro data into one data flow
- the selection of Pharus IDs and gyros should be done via UI

Status:

* slot logic exists from SystemFailed

Whish:

* create module that is sustainable and can be used in future projects

Trainingdata Recorder

- records tracking data and sound control data

Composer

one workflow to create the training data will be, to compose a musical composition and let the performer move to it.

ML

- basic feed forward NN, designed to make a corelative mapping
- INPUT -> DENSE -> DENSE -> OUTPUT

Status:

* working code base (Keras / Tensorflow) exists

Wish:

* make the NN input dynamically change it'S input dim, according to the trainingset
 * implement a LSTM for comparison
 * UI for load, save, train model

digital entity

- the performers antagonist personified by a moving head beam light and a sound
- has different behavirol modes:
 - light up performer
 - mirror performers movements
 - reacts on performers movement driven by a genetic algorithm