

Project Sensors

In our CATHIS® Simulator we use different types of hardware sensors for the following real-time measurements:

- Movements of medical instruments (catheters, wires, stents etc.);
- Medical instrument diameters;
- Volume and pressure of liquids introduced into the simulator;
- Reaction forces applied to medical instruments.

In order to increase the accuracy and speed of CATHIS® simulation, the sensors are currently being improved and partially redesigned (using custom 3D printed components).

The main objects of the project:

- Improvement of the sensors hardware and design;
- Calibration and control of the sensors using different APIs.

Requirements:

- Raspberry
- Arduino
- Sensors
- Python, shell, scripts
- Modelling for 3D printing

