

Overview

The third homework (HW3) is about lab 12, where an unknown time-varying potential difference between the terminals of a robot snail was investigated. This time the focus of the report is on delivering as much information as possible on a **maximum of two figures**. The document should still have a title page and follow the given formatting rules, but it should not contain any other content besides the figure(s) with their captions.

The figure(s) should clearly communicate:

- the signal source and the measurement setup
- two signal components with their characteristics (e.g., waveform type, frequency, amplitude, stability, noise, ...)
- Data acquisition parameters as much as significant (i.e., sample resolution in time and voltage) to justify the choices in DAQ configuration

Use insets, subfigures, annotations, guides for the eye, caption, and other elements/techniques to make the content self-explanatory for the scientific audience.

Requirements

- **2p** The graphical items allow repeating the experiment with all its components and connections.
- **2p** A suitable approach is used for visualizing signal components of different time scales. Insets or subfigures in which content is linked are accompanied by necessary annotations that make the relation apparent.
- **2p** The graphical items allow identifying the main characteristics of both signal components. Sample resolution in time and voltage is shown.
- **1p** Triggering moment and type are evident in the graphical items.
- **1.5p** Graphical items use appropriate data framing, scaling, units, font size, resolution, and a significant number of digits, and contain no excessive information.
- **1.5p** Figure caption(s) is no longer than 150 words and supports the plotted data as well as the used annotations to render the graphical items as a whole self-explanatory

Uploading the homework

Upload the report in a **pdf** format using the following naming pattern:

- **FirstName_LastName_HW3_report.pdf**

Make sure your **portfolio** contains:

- the original measurement data (.txt, .csv, ...) that was used in the report;
- any VI-s or other source code that was created to acquire or process the data