

Generic MATLAB GUI for Digital Oscilloscopes

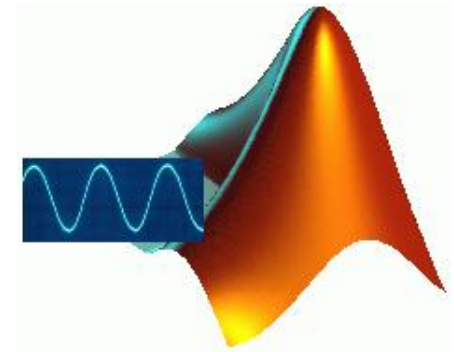
Motivation

The IAIKs MATLAB toolbox already contains functions to control various digital oscilloscopes (e.g. Gagescope, LeCroy, Agilent) by loading appropriate configuration scripts.

The different functions for controlling various oscilloscopes shall be combined into one useful and powerful MATLAB GUI, containing snapshots of one or more channels, trigger setup, time setup, channel setup, etc...

Project description

- Goals
 - Implement a fully functional generic GUI to operate digital oscilloscopes via a uniform interface
- Tasks
 - Work with MATLAB GUI development
 - Get familiar with the existing oscilloscope interfaces
 - Unify the different interfaces to one useful basis
 - Implement a MATLAB GUI that works with the existing oscilloscope interfaces
 - Create a useful documentation



Deliverables

- Project files (.zip, cleaned)
- Documentation (paper)
- Readme (getting started)
- Presentation (10 .ppt slides)

Project schedule

- Start Immediately
- Block 1 Reading, learn and unify interfaces
- Block 2 Implement the GUI, test + verify

Bachelor Project

Studies: INF SEW TEL

Prerequisites

- MATLAB + GUIDE (GUI Development Environment)

Advisor / contact

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