Technical Report Preparation

2025-08-25

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Technical Report Preparation

Each lab exercise will have an associated technical report submitted. These reports will be prepared and submitted using Python-based Jupyter notebooks that will be included as part of your assignment git repositories.

You will need to be able to perform the following tasks in your Jupyter notebooks:

- Read CSV text data saved from an oscilloscope.
- Perform signal processing (e.g., FFT, filtering, etc.) on the data.
- Perform simple statistics (e.g., mean, standard deviation, 95% CI) on the data.
- Generate plots

> Tip
>
> An example technical report can be found here.

Python Virtual Environment

Preparing your technical reports will require either:

1. Using a cloud-based Jupyter notebook platform (e.g., Google CoLab), or
2. Use a local Python virtual environment on your laptop with the necessary packages installed.

If you need to install a Python environment on your laptop, then this is a good starting point: Getting Started with Python in VS Code.

This is a good tutorial on getting started with Jupyter notebooks in VS Code: Jupyter Notebooks in Visual Studio Code.