OIA Lab 3: LabView Interface for Optical Immunoassay

BIOE 385 Bioinstrumentation Laboratory

Goals

1. Refresh your understanding of LabView
2. Begin to build and troubleshoot features in your LabView program

Textbook Readings

Note: these readings will help you with your project. You are responsible for knowing this information before lab.

- 3.1: Wires, Cables, and Connectors
- 3.5: Resistors
- 3.6: Capacitors
- 7.3: Multimeters
- 7.4: Osciolloscopes

Pre-lab Assignment (to be completed individually)

Draw a proposed graphical user interface for your project, considering the data values, graphs, and tables you will show. What do you think the user of your device will want to see? What features do you think are most important?

In-lab Assignment

Set up a LabView Interface to view and collect the data from your device. How this interface looks and behaves is up to you. You should consider the following when planning your LabView Program:

- How do you want to collect data?
- Do you want to view data as a graph or do you want to display numbers?
- Do you want to collect data at certain times?
- Do you want to user to have a history of the data collected?

The level of complexity will be reflected in your grade, but whatever level of complexity and detail you use, it should work by the time you turn it in. Tip: start slowly and build up from simple to more complex. If you are ready to begin testing, speak to your instructor about the possibility of getting some test samples now.