Report of Hands-on training Workshop on NI LabVIEW & Hardware Platform 08th to 10th JUNE, 2022, at BMS College of Engineering, Bengaluru.

DAY 1

Date: 8th June 2022

The Department of Medical Electronics and BMSCE IEEE SB in collaboration with VI Solutions conducted a 3-day hands on training programme. The programme focussed on educating the attendees on Graphical System Design on NI LabVIEW and HW Platforms. It was conducted over a course of 3 days; on 8th June 2022, 9th June 2022 and 10th June 2022 from 9 AM - 5 PM. The speaker, Mr. Satyanarayan R Achar, Application Engineer at VI solutions, on the first day acquainted the attendees on the Basics of Engineering solutions using Graphical System Design and introduced the LabVIEW Environment. The session was followed by Hands on LabVIEW by demonstration of certain programming concepts such as Structures and Loops. The attendees found the session to be insightful and were quite eager to explore LabVIEW and Graphical System Design.



MORNING SESSION



AFTERNOON SESSION

DAY 2

Date: 9th June 2022

Mr.Satyanarayan Achar, began the 2nd session introducing the attendees to the concepts of Arrays and Clusters in LabVIEW. This was followed by an explanation of shift registers till lunch break. Post lunch, the attendees were introduced to the NI myDAQ Hardware Platform along with a hands on session on data acquisition and interfacing with other components like LEDs. Here are few sample programes that were taught during the session:

- 1. Size Of An Array
- 2. Indexing Of An Array
- 4. 1-D Array
- 5. 2 D Array
- 6. Mydag Interfaced With An Led

The participants were keen on learning about the software and were very interested to work with the NI myDAQ hardware. The session was interactive and engaging.



INTERACTIVE MORNING SESSION



HANDS ON EXPERIENCE WITH NI myDAQ

DAY 3

Date: 10th June 2022

The speaker, mr. Satyanarayan Achar, began the 3rd session introducing the attendees to the concepts of NI DAQmx and DAQ Assistant. The attendees were also briefed about the difference between port and line with respect to NI DAQmx.

Here are few sample programs that were taught during the session:

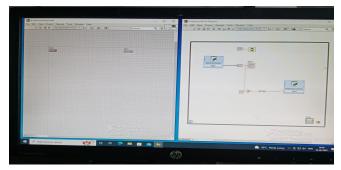
- 1. Blinking LED
- 2. IR Based Visitors Counter
- 3. Waveform Output

Post lunch, the students were introduced to myRIO, where the instructor helped the students understand the in and out thoroughly by splitting the students in groups for better discussion based understanding. The attendees were given a demo of NI myRIO for Real time Data Acquisition.

The programme saw a total of 50 participants which consisted of IEEE members and non-IEEE members and the Professors from the Department.

The session was ended by a Vote of Thanks given by IEEE SB committee members. The Head of the Department of Medical Electronics Engineering addressed the students about this workshop and took their valuable feedback, which was followed by a Q&A session.

The students thanked the department and the instructor for their relentless efforts.



HANDS ON EXPERIENCE WITH NI myDAQ

