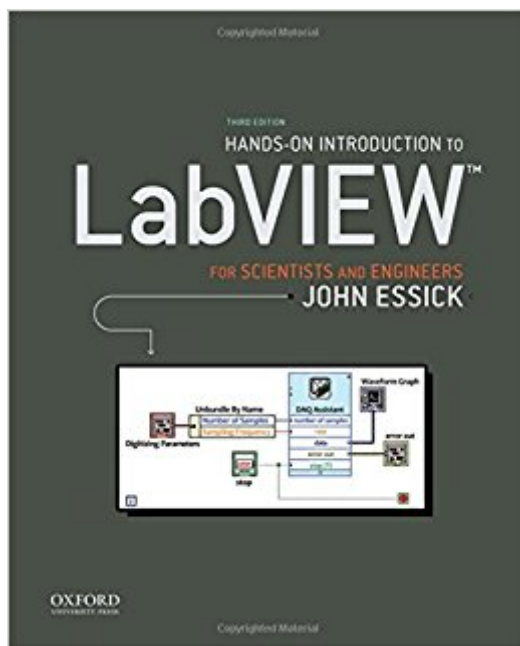


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Hands-On Introduction To LabVIEW For Scientists And Engineers



Synopsis

Hands-On Introduction to LabVIEW for Scientists and Engineers, Third Edition, explores practical programming solutions for carrying out interesting and relevant projects. Readers--who are assumed to have no prior computer programming or LabVIEW background--will begin writing meaningful programs in the first few pages. Improvements to the Third Edition: This new edition includes the following improvements: * All chapters are fully updated to the latest version of LabVIEW. DAQ hardware now commonly used in instructional laboratories and self-learning is highlighted. * For easy reference, seven chapters begin with a "Basics" section that explains the fundamental operation of the LabVIEW function covered in that chapter [Chapters 2, 3, 4, 7, 8, 9, 12]. * A new first chapter offers focused introduction to the LabVIEW programming environment. Readers construct a simple program to detect whether a given integer is even or odd [Chapter 1]. * Coverage of LabVIEW's text-based functions is given for both the MathScript Node and Formula Node [Chapter 4 and Appendix A]. * Shift register usage is illustrated through a signal-averaging program (replacing the numerical integration and differentiation programs used in previous editions) [Chapter 7]. * State machine program architecture is now taught in the case structure chapter (replacing the numerical integration program used in previous editions). Readers construct a state-machine guessing game and a digital oscilloscope with runtime control [Chapter 8]. * A nonlinear curve fitting example is included in the text [Chapter 10]. * The fast Fourier transform chapter opens with an Express VI-based "Quick Example" section, which gives a concise introduction to the digital spectral analysis topics of leakage and windowing. High-level mathematical coverage of these topics is moved to an appendix [Chapter 11 and Appendix B]. * The proportional-integral-derivative temperature control project is now given in an appendix [Appendix C]. * About 20 new end-of-the-chapter problems appear throughout the book. More information about this book can be found here:

reed.edu/physics/faculty/essick/labview.html
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Customer Reviews

"The hands-on method really allows students to learn the material in sufficient depth. I know of no other book that comes even close."--Mark Beck, Whitman College
"This book is exactly what I need to fill gaps in student understanding of LabVIEW."--Eric Ayars, California State University, Chico
"This text is the most comprehensive and readable book available for LabVIEW."--Ladimer S. Nagurney, University of Hartford

TABLE OF CONTENTS Each chapter ends with "Do It Yourself" and "Problems" sections. Preface
1. LABVIEW PROGRAM DEVELOPMENT 1.1 LabVIEW Programming Environment 1.2 Blank VI 1.3 Front-Panel Editing 1.4 Block-Diagram Editing 1.5 Program Execution 1.6 Pop-Up Menu and Data-Type Representation 1.7 Program Storage 1.8 Quick Drop
2. THE WHILE LOOP AND WAVEFORM CHART 2.1 Programming Structures and Graphing Modes 2.2 While Loop Basics 2.3 Sine-Wave Plot Using a While Loop and Waveform Chart 2.4 LabVIEW Help Window 2.5 Front Panel Editing 2.6 Waveform Chart Pop-Up Menu 2.7 Finishing the Program 2.8 Program Execution 2.9 Program Improvements 2.10 Data Types and Automatic Creation Feature
3. THE FOR LOOP AND WAVEFORM GRAPH 3.1 For Loop Basics 3.2 Sine-Wave Plot Using a For Loop and Waveform Graph 3.3 Waveform Graph 3.4 Owned and Free Labels 3.5 Creation of Sine Wave Using a For Loop 3.6 Cloning Block-Diagram Icons 3.7 Auto-Indexing Feature 3.8 Running the VI 3.9 X-Axis Calibration of the Waveform Graph 3.10 Sine-Wave Plot Using a While Loop and Waveform Graph 3.11 Front-Panel Array Indicator 3.12 Debugging With the Probe-Watch Window and Error List
4. THE MATHSCRIPT NODE AND XY GRAPH 4.1 Mathscript Node Basics 4.2 Quick Mathscript Node Example: Sine-Wave Plot 4.3 Waveform Simulator Using a Mathscript Node and XY Graph 4.4 Creating an XY Cluster 4.5 Running the VI 4.6 LabVIEW Mathscript Window 4.7

Adding Shape Options Using an Enumerated Type Control 4.8 Finishing the Block Diagram 4.9 Running the VI 4.10 Control and Indicator Clusters 4.11 Creating an Icon Using the Icon Editor 4.12 Icon Design 4.13 Connector Assignment

5. DATA ACQUISITION USING DAQ ASSISTANT 5.1 Data Acquisition VIs 5.2 Data Acquisition Hardware 5.3 Analog Input Modes 5.4 Range and Resolution 5.5 Sampling Frequency and the Aliasing Effect 5.6 Measurement & Automation Explorer (MAX) 5.7 Simple Analog Input Operation on a DC Voltage 5.8 Digital Oscilloscope 5.9 Analog Output 5.10 DC Voltage Source 5.11 Software-Timed Sine-Wave Generator 5.12 Hardware-Timed Waveform Generator 5.13 Placing a Custom-Made VI on a Block Diagram 5.14 Completing and Executing Waveform Generator (Express) 5.15 Modified Waveform Generator

6. DATA FILES AND CHARACTER STRINGS 6.1 ASCII Text and Binary Data Files 6.2 Storing Data in Spreadsheet-Formatted File 6.3 Storing a One-Dimensional Data Array 6.4 Transpose Option 6.5 Storing a Two-Dimensional Data Array 6.6 Controlling the Format of Stored Data 6.7 The Path Constant and Platform Portability 6.8 Fundamental File I/O VIs 6.9 Adding Text Labels to a Spreadsheet File 6.10 Backslash Codes

7. SHIFT REGISTERS 7.1 Shift Register Basics 7.2 Quick Shift Register Example: Integer Sum 7.3 Noise and Signal Averaging 7.4 Noisy Sine VI 7.5 Moving Average of Four Traces 7.6 Modularity and Automatic SubVI Creation 7.7 Moving Average of Arbitrary Number of Traces

8. THE CASE STRUCTURE 8.1 Case Structure Basics 8.2 Quick Case Structure Example: Runtime Options Using Property Nodes 8.3 State Machine Architecture: Guessing Game 8.4 State Machine Architecture: Expressed VI-Based Digital Oscilloscope

9. DATA DEPENDENCY AND THE SEQUENCE STRUCTURE 9.1 Data Dependency and Sequences Structure Basics 9.2 Event Timer Using a Sequence Structure 9.3 Event Timer Using Data Dependency 9.4 Highlight Execution

10. ANALYSIS VIs: CURVE FITTING 10.1 Thermistor Resistance-Temperature Data File 10.2 Temperature Measurement Using Thermistors 10.3 The Linear Least-Squares Method 10.4 Inputting Data to a VI Using a Front-Panel Array Control 10.5 Inputting Data to a VI by Reading from a Disk File 10.6 Slicing Up a Multi-Dimensional Array 10.7 Running the VI 10.8 Curve Fitting Using the Linear Least-Squares Method 10.9 Residual Plot 10.10 Curve Fitting Using the Nonlinear Least-Squares Method

11. ANALYSIS VIs: FAST FOURIER TRANSFORM 11.1 Quick Fast Fourier Transform Example 11.2 The Fourier Transform 11.3 Discrete Sampling and the Nyquist Frequency 11.4 The Discrete Fourier Transform 11.5 The Fast Fourier Transform 11.6 Frequency Calculator VI 11.7 FFT of Sinusoids 11.8 Applying the FFT

to Various Sinusoidal Inputs 11.9 Magnitude of Complex-Amplitude 11.10 Observing Leakage 11.11 Windowing 11.12 Estimating Frequency and Amplitude 11.13 Aliasing

12. DATA ACQUISITION AND GENERATION USING DAQMX VIs 12.1 DAQmx VI Basics 12.2 Simple Analog Input Operation on a DC Voltage 12.3 Digital Oscilloscope 12.4 Express VI Automatic Code Generation 12.5 Limitations of Express VIs 12.6 Improving Digital Oscilloscope Using State Machine Architecture 12.7 Analog Output Operations 12.8 Waveform Generator

13. CONTROL OF STAND-ALONE INSTRUMENTS 13.1 Instrument Control using VISA VIs 13.2 The VISA Session 13.3 The IEEE 488.2 Standard 13.4 Common Commands 13.5 Status Reporting 13.6 Device-Specific Commands 13.7 Specific Hardware Used In This Chapter 13.8 Measurement & Automation Explorer(MAX) 13.9 Simple VISA-Based Query Operation 13.10 Message Termination 13.11 Getting and Setting Communication Properties Using a Property Node 13.12 Performing a Measurement over the Interface Bus 13.13 Synchronization Methods 13.14 Measurement VI Based on the Serial Poll Method 13.15 Measurement VI Based on the Service Request Method 13.16 Creating an Instrument Driver 13.17 Using the Instrument Driver to Write an Application Program

APPENDIX A. FORMULA NODE PROGRAMMING FOR CHAPTER 4 A.1 Formula Node Basics A.2 Quick Formula Node Example: Sine-Wave Plot (Section 4.2) A.3 Formula Node-Based Waveform Simulator (Sections 4.3-4.4) A.4 Formula Node-Based Waveform Simulator (Section 4.8) A.5 Formula Node-Based Waveform Simulator (Section 4.10)

APPENDIX B. MATHEMATICS OF LEAKAGE AND WINDOWING B.1 Analytic Description of Leakage B.2 Description of Leakage Using the Convolution Theorem

APPENDIX C. PID TEMPERATURE CONTROL PROJECT C.1 Project Description C.2 Voltage-Controlled Bidirectional Current Driver for Thermoelectric Device C.3 PID Temperature Control Algorithm C.4 PID Temperature Control System C.5 Construction of Temperature Control System

Index

This book so far has been very helpful. It has a lot of condensed information with projects associated with topics. I have been able to practice all of the projects using my NI LabVIEW Home edition so far. If your just starting out with LabVIEW and you have no other history with it, NI's Core learning books are going to have the greatest initial impact. I feel this book in conjunction with the LabVIEW Core learning books will prove to be a powerful tool that will boost your learning and get you up to speed faster. However, If you only have this book and are starting from scratch with absolutely no prior knowledge of LabVIEW, you may find your self learning at a slower pace. NI

sells there Core learning books and Certifications courses on the NI website. Good luck in your LabVIEW journey.

Great book for LabVIEW reference. 3 stars for no color! I am a visual learner and reading is very difficult for me. Even though the book does read well compared to text books the lack of color is really a silly oversight for this kind of publication, but the contents are relevant if you use LabView.

This book seems to be a good book to start if you want to learn LabVIEW since most of people had offered positive comments about it. After skimming through the book, I do agree that the positive comments offered by the previous readers were indeed not overexaggerated!

A great book to help you get started. It is well written, very accurate and precise about each step you have to take to build up an example. Definitely worth!

I have been doing labview for more than 10 years, I bought many books to help in using it, this book is truly the best ever, very user friendly and excellent to follow. Learned a lot from this book than any other. I wish I had this when I got started in labview. I just finished chapter 10, will definitely reread this book when finished.

Excellent book, especially for beginners. Some projects are very easy to do, however the book is taking you step by step. I guess most of the exercises are part of the Core 1 from NI.

This is a very good book for someone who is taking a class or programmer who would like to learn LabVIEW. It is easy to read and does not bore you with useless extra text.

The examples provided and the problems that can be completed give hands-on experience in applying the coding objects which can be linked together to form useful measurement and control software for laboratory work.

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