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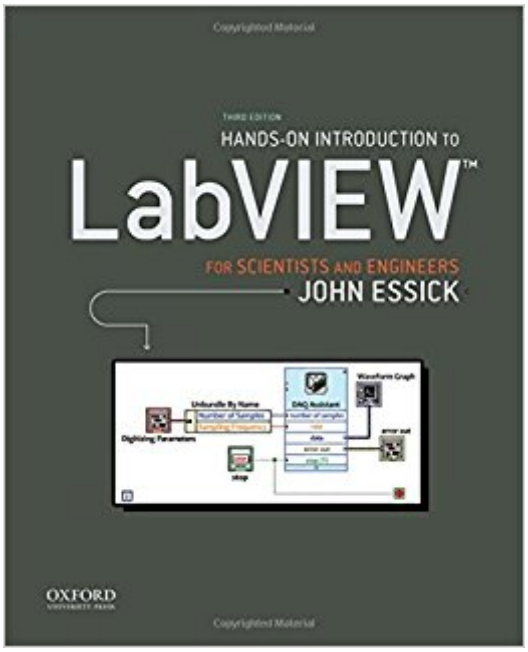

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Synopsis

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].Â * 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.htmlglobal.oup.com/academic/product/hands-on-introduction-to-labview-for-scientists-and-engineers-9780190211899?cc=us&lang=en&#

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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

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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 thought the book does read well compared to text books the lack of color is really a silly over site for this kind of publication, but the contents are revelent 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 stared 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 east 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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