

Digital Electronics for Musicians

Build Intuitive Electronics and Electroacoustic Music Interfaces

Dive into the world of computer music and physical computing and stay ahead of the melodic curve. This book is aimed at adventurous musicians who want to learn about music programming with Arduino, sensors, and Pure Data, and how to make new interfaces and instruments with that knowledge.

In this updated version, you can expect a wave of updates that bring the content in sync with the latest tech trends. The book now features revamped code and visuals throughout, all tailored to match the cutting-edge versions of Pure Data, Arduino IDE, and the powerful Raspberry Pi 5. What's even more thrilling is the integration of the Bela platform for audio enthusiasts, alongside an expanded wireless toolkit that includes both Wi-Fi and the trusty XBee. To ensure a smoother journey, there are more project-enhancing images to guide you, and a brand-new chapter dedicated to AI, based on the author's innovative neuralnet object for Pure Data, as showcased in the AIMC conference proceedings.

You'll start with the basics of the Pure Data and Arduino languages, how to incorporate sensors into your musical projects, and how to use embedded computers, like the Raspberry Pi, to create stand-alone projects. Along the way, you'll learn how to create a variety of innovative musical projects, including an interactive glove that can be used bystringed instrumentalists or other musicians, an interactive drum set, a patch-bay matrix synthesizer, a guitar looper, a DIY theremin, and even DIY instruments that incorporate AI.

If you are a musician or tinkerer who wants to explore the world of electronic and electroacoustic music, then , is the book for you.

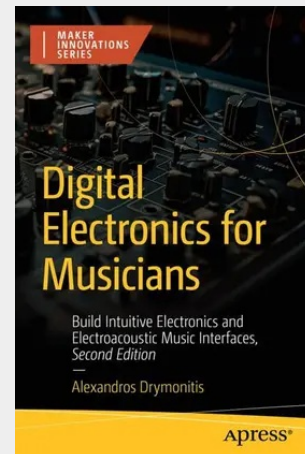
What You Will Learn

- Incorporate sensors into your musical projects.
- Combine Arduino and Pure Data to bring the physical world to computers.
- Use additional libraries that extend the capabilities of the Arduino.
- Work with external objects in Pure Data and create your own patches from scratch.
- Write your own sketches with Arduino.

Who This Book Is For

Musicians who want to explore the world of electronic and electroacoustic music.

Dive into the world of computer music and physical computing and stay ahead of the melodic curve. This book is aimed at adventurous musicians who want to learn about music programming with Arduino, sensors, and Pure Data, and how to make new interfaces and instruments with that knowledge. In this updated version, you can expect a wave of updates that bring the content in sync with the latest tech trends. The book now features revamped code and visuals throughout, all tailored to match the cutting-edge versions of Pure Data, Arduino IDE, and the powerful Raspberry Pi 5. What's even more thrilling is the integration of the Bela platform for audio enthusiasts, alongside an expanded wireless toolkit that includes both Wi-Fi and the trusty XBee. To ensure a smoother journey, there are more project-enhancing images to guide you, and a brand-new chapter dedicated to AI, based on the author's innovative neuralnet object for Pure Data, as showcased in the AIMC conference proceedings. You'll start with the basics of the Pure Data and Arduino languages, how to incorporate sensors into your musical projects, and how to use embedded computers, like the Raspberry Pi, to create stand-alone projects. Along the way, you'll learn how to create a variety of innovative musical projects, including an interactive glove that can be used bystringed instrumentalists or



64,19 €

59,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9798868803932

Medium: Buch

ISBN: 979-8-8688-0393-2

Verlag: Apress

Erscheinungstermin: 07.09.2024

Sprache(n): Englisch

Auflage: 2. Auflage 2024

Serie: Maker Innovations Series

Produktform: Kartoniert

Gewicht: 850 g

Seiten: 543

Format (B x H): 155 x 235 mm

