

# **Raspberry Pi Retro Gaming**

**Build Consoles and Arcade  
Cabinets to Play Your Favorite  
Classic Games**

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**Apress®**

# *Raspberry Pi Retro Gaming: Build Consoles and Arcade Cabinets to Play Your Favorite Classic Games*

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ISBN-13 (pbk): 978-1-4842-5152-2  
<https://doi.org/10.1007/978-1-4842-5153-9>

ISBN-13 (electronic): 978-1-4842-5153-9

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# About the Authors

**Mark Frauenfelder** is a research director at Institute for the Future and the founder of Boing Boing, a web site about current events with five million monthly unique viewers. He was the founding editor-in-chief of *MAKE*, the only magazine exclusively devoted to do-it-yourself projects, and the founding editor-in-chief of *Wired* online. He was an editor at *Wired* magazine and *Wired* books from 1993 to 1998. He's also the editor-in-chief of Cool Tools, a tool review site with roots to the *Whole Earth Catalog*. Mark's also an artist and designer, and his work has appeared in group and solo gallery exhibitions throughout the United States. He designed Billy Idol's *Cyberpunk* CD cover, video box, and print advertisements. He lives in Los Angeles with his wife, writer Carla Sinclair (founding editor-in-chief of *CRAFT* magazine), and his two daughters.

**Ryan Bates** runs the arcade building web site [RetroBuiltGames.com](http://RetroBuiltGames.com) specializing in DIY kits and comprehensive tutorials for building mini arcades, claw machines, and other arcade/video game-related nostalgia. Ryan is a full-time fabrication instructor at the Carnegie Mellon University engineering makerspace in Pittsburgh, PA.



# What's in This Book

The goal of *Raspberry Pi Retro Gaming* is to teach you how to set up a Raspberry Pi to play your favorite classic games and to show you how to make your own handheld, console, and bartop arcade cabinet using a Raspberry Pi. Here's a breakdown of the chapters:

## Chapter 1: The World of Raspberry Pi Retro Gaming

Chapter goal: Introducing the world's current and most beloved single-board computer, the Raspberry Pi, and its reputation in the retro gaming community

## Chapter 2: Setting Up the Raspberry Pi for Retro Gaming

Chapter goal: Getting familiar with the Raspberry Pi and emulators

## Chapter 3: A Closer Look at RetroPie

Chapter goal: The things you'll need to know to use RetroPie to play different games, save games, and customize the interface

## **Chapter 4: Enclosure for Your Raspberry Pi**

Chapter goal: a quick overview and comparison of readily available cases for the Raspberry Pi plus steps how to build your own

## **Chapter 5: Modern Fabrication Tools**

Chapter goal: an introduction to modern tools and methods for cutting wood plus mechanical design fundamentals to start your first arcade cabinet build

## **Chapter 6: Installing the Electronics**

Chapter goal: detail instructions covering the what and why regarding the electronic components of a miniature arcade cabinet

## **Chapter 7: Build a Desktop RetroPie Arcade**

Chapter goal: Step-by-step instructions for building a larger bartop-sized arcade machine for two players on a budget