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Titolo	Learn Electronics with Raspberry Pi : Physical Computing with Circuits, Sensors, Outputs, and Projects / / by Stewart Watkiss
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2016
ISBN	9781484218983 1484218981
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XXIV, 290 p. 191 illus., 153 illus. in color.)
Collana	Technology in action
Disciplina	005.18
Soggetti	Makerspaces Microprogramming Computer systems Compilers (Computer programs) Maker Control Structures and Microprogramming Computer System Implementation Compilers and Interpreters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Getting started with electronic circuits -- All about Raspberry Pi -- Starting with the basics: programming with scratch -- Using Python for input and output: GPIO zero -- More input and output: infrared sensors and LCD displays -- Adding control in Python and Linux -- Creating video with a Pi camera -- Rolling forward: designing and building a robot -- Customize your gameplay: Minecraft hardware programming -- Making your circuits permanent -- Let the innovation begin: designing your own circuits.
Sommario/riassunto	Make a variety of cool projects using the Pi with programming languages like Scratch and Python, with no experience necessary. You'll learn how the Pi works, how to work with Raspbian Linux on the Pi, and how to design and create electronic circuits. Raspberry Pi is everywhere, it's inexpensive, and it's a wonderful tool for teaching about electronics and programming. This book shows you how to

create projects like an arcade game, disco lights, and infrared transmitter, and an LCD display. You'll also learn how to control Minecraft's Steve with a joystick and how to build a Minecraft house with a Pi, and even how to control a LEGO train with a Pi. You'll even learn how to create your own robot, including how to solder and even design a printed circuit board! Learning electronics can be tremendous fun — your first flashing LED circuit is a reason to celebrate! But where do you go from there, and how can you move into more challenging projects without spending a lot of money on proprietary kits? Learn Electronics with Raspberry Pi shows you how to and a lot more. What You'll Learn Design and build electronic circuits Make fun projects like an arcade game, a robot, and a Minecraft controller Program the Pi with Scratch and Python Who This Book Is For Makers, students, and teachers who want to learn about electronics and programming with the fun and low-cost Raspberry Pi.
