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Collana	Technology in action
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Nota di contenuto	""Contents at a Glance""; ""Contents""; ""About the Author""; ""About the Technical Reviewers""; ""Acknowledgments""; ""Introduction""; ""Chapter 1: Getting Started""; ""How to Use This Book""; ""What You Will Need""; ""What Exactly Is an Arduino?""; ""Setting Up Your Arduino""; ""Upload Your First Sketch""; ""The Arduino IDE""; ""Summary""; ""Chapter 2: Light a€?Em Up""; ""Project 1 a€? LED Flasher""; ""Parts Required""; ""Connect It Up""; ""Enter the Code""; ""Project 1 a€? LED Flasher a€? Code Overview""; ""Project 1 a€? LED Flasher a€? Hardware Overview"" ""Project 2 a€? S.O.S. Morse Code Signaler""""Enter the code""; ""Project 2 a€? S.O.S. Morse Code Signaler a€? Code Overview""; ""Project 3 a€? Traffic Lights""; ""Parts Required""; ""Connect It Up""; ""Enter the Code""; ""Project 4 a€? Interactive Traffic Lights""; ""Parts Required""; ""Connect It Up""; ""Enter the Code""; ""Project 4 a€? Interactive Traffic Lights - Code Overview""; ""Project 4 a€? Interactive Traffic Lights - Hardware Overview""; ""Logic States""; ""Pull-Down Resistors""; ""Pull-Up Resistors""; ""The Arduinoa€?s Internal Pull-Up Resistors""; ""Summary"" ""Chapter 3: LED Effects""""Project 5 a€? LED Chase Effect""; ""Parts Required""; ""Connect It Up""; ""Enter the Code""; ""Project 5 a€? LED Chase Effect a€? Code Overview""; ""Project 6 a€? Interactive LED Chase Effect""; ""Parts Required""; ""Connect It Up""; ""Enter the Code""; ""Project 6 a€? Interactive LED Chase Effect a€? Code Overview"";

""Project 6 a€? Interactive LED Chase Effect a€? Hardware Overview"";
""Project 7 a€? Pulsating Lamp""; ""Parts Required""; ""Connect It Up"";
""Enter the Code""; ""Project 7 a€? Pulsating Lamp a€? Code Overview"";
""Project 8 a€? RGB Mood Lamp""
""Parts Required""""""Connect It Up""; ""Enter the Code""; ""Project 8 a€?
RGB Mood Lamp a€? Code Overview""; ""Project 9 a€? LED Fire Effect"";
""Parts Required""; ""Connect It Up""; ""Enter the Code""; ""Project 9 a€?
LED Fire Effect a€? Code Overview""; ""Project 10 a€? Serial Controlled
Mood Lamp""; ""Enter the Code""; ""Project 10 a€? Serial-Controlled
Mood Lamp a€? Code Overview""; ""Pointers in a Nutshell"";
""Summary""; ""Chapter 4: Simple Sounders and Sensors""; ""Project 11 a
€? Piezo Sounder Alarm""; ""Parts Required""; ""Connect It Up""; ""Enter
the Code""
""Project 11 a€? Piezo Sounder Alarm a€? Code Overview""""""Project 11 a
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Piezo-Sounder Melody Player""; ""Enter the Code""; ""Project 12 a€?
Piezo-Sounder Melody Player a€? Code Overview""; ""Project 13 a€?
Piezo Knock Sensor""; ""Parts Required""; ""Connect It Up""; ""Enter the
Code""; ""Project 13 a€? Piezo Knock Sensor a€? Code Overview"";
""Project 14 a€? Light Sensor""; ""Parts Required""; ""Connect It Up"";
""Enter the Code""; ""Project 14 a€? Light Sensor a€? Hardware
Overview""; ""Summary""
""Chapter 5: Driving a DC Motor""

Sommario/riassunto

Want to light up a display? Control a touch screen? Program a robot? The Arduino is a microcontroller board that can help you do all of these things, plus nearly anything you can dream up. Even better, it's inexpensive and, with the help of Beginning Arduino, Second Edition, easy to learn. In Beginning Arduino, Second Edition, you will learn all about the popular Arduino by working your way through a set of 50 cool projects. You'll progress from a complete Arduino beginner to intermediate Arduino and electronic skills and the confidence to create your own amazing projects. You'll also learn about the newest Arduino boards like the Uno and the Leonardo along the way. Absolutely no experience in programming or electronics required! Each project is designed to build upon the knowledge learned in earlier projects and to further your knowledge of Arduino programming and electronics. By the end of the book you will be able to create your own projects confidently and with creativity. You'll learn about: Controlling LEDs Displaying text and graphics on LCD displays Making a line-following robot Using digital pressure sensors Reading and writing data to SD cards Connecting your Arduino to the Internet This book is for electronics enthusiasts who are new to the Arduino as well as artists and hobbyists who want to learn this very popular platform for physical computing and electronic art. Please note: The print version of this title is black and white; the eBook is full color. The color fritzing diagrams are available in the source code downloads on http://www.apress.com/9781430250166 .