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Nota di contenuto	""Contents at a Glance""; ""Contents""; ""About the Author""; ""About the Technical Reviewer""; ""Acknowledgments""; ""Introduction""; ""Chapter 1: LEGO, Arduino, and The Ultimate Machine""; ""Introducing the Arduino""; ""Your First Arduino Program""; ""Programming the Ultimate Machine""; ""Assembling the Arduino and Motor""; ""Programming the Arduino""; ""Building the Ultimate Machine""; ""Selecting the Dimensions""; ""Building the Brick Walls""; ""Adding The Arduino""; ""Adding LEGO Arms and a Switch""; ""Raising the Walls""; ""Building the Lid""; ""Summary"" ""Chapter 2: Using Sensors with the Android""""""The Ultrasound Sensor""; ""Adding Additional Sensors""; ""Building the Android""; ""Start with the Foundation""; ""Building a Harness for the Arduino""; ""Adding a Level for the Power Plug""; ""Building the Body""; ""Adding Arms and Sensors""; ""Separating the Body from the Head""; ""Building the Head""; ""Turning the Head""; ""Supporting the Head""; ""Creating the Legs""; ""Building the Arms""; ""Building the Antenna""; ""Summary""; ""Chapter 3: Twitter Pet""; ""Connecting the Arduino to the Internet""; ""Building The Twitter Pet"" ""Building the Base""""""Setting the Arduino in Place""; ""Covering the Arduino""; ""Adding Rings""; ""The First Ring""; ""The Second Ringa€? Two Bricks High""; ""The Third Ringa€?Four Bricks High""; ""The Fourth

Ringa€?Four Bricks High""; ""The Fifth Ringa€?Three Bricks High"";
""Adding the Eyes and Nose""; ""Adding the Head""; ""Summary"";
""Chapter 4: RFID and the Crystal Ball""; ""Arduino and RFID"";
""Generating Magic with Code""; ""Building the Crystal Ball""; ""Building
the Base""; ""Building the Lid""; ""Building the Sphere""; ""Assembling the
Bottom Half of the Sphere""
""Adding the Bottom of the Sphere to the Base""""""Completing the Top
Half of the Sphere""; ""Building the Magic Wand""; ""Summary"";
""Chapter 5: Animating the TARDIS""; ""Doctoring the TARDIS"";
""Coding the Wave Shield""; ""The Chameleon Circuit: Building the
TARDIS""; ""Building the Walls""; ""Securing the Walls""; ""Building the
Windows""; ""Installing the Windows""; ""Adding the Arduino""; ""Back to
the Body . . .""; ""Creating Labels""; ""Building the Roof""; ""Summary"";
""Chapter 6: Controlling LEGO Trains with Arduino""; ""Arduino Train
Controls""; ""Programming the Train Controls""
""Building the Train Station""""""Building a LEGO Train""; ""Adding
Wheels""; ""Adding the Battery Pack""; ""Adding the IR Receiver"";
""Summary""; ""Chapter 7: Building a Light-Sensitive Box""; ""The Boxa€?
s Mechanics""; ""Programming the Box""; ""Building the Box""; ""Adding
the Arduino""; ""Adding the Motor""; ""Adjusting the Wall Height"";
""Adding Hinges""; ""Adding a Lid""; ""Summary""; ""Appendix A: Parts
List""; ""Chapter 1: LEGO, Arduino, and the Ultimate Machine"";
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""Electronics""; ""LEGO""
""Chapter 3: Twitter Pet""

Sommario/riassunto

We all know how awesome LEGO is, and more and more people are discovering how many amazing things you can do with Arduino. In Arduino and LEGO Projects, Jon Lazar shows you how to combine two of the coolest things on the planet to make fun gadgets like a Magic Lantern RF reader, a sensor-enabled LEGO music box, and even an Arduino-controlled LEGO train set. Learn that SNOT is actually cool (it means Studs Not on Top) See detailed explanations and images of how everything fits together Learn how Arduino fits into each project, including code and explanations Whether you want to impress your friends, annoy the cat, or just kick back and bask in the awesomeness of your creations, Arduino and LEGO Projects shows you just what you need and how to put it all together.