Books about Home and Classroom Electronics Tinkering, Hacking, Programming, and having fun with Raspberry Pi, Arduino, Intel Edison, Intel Galileo, and the like

Collection of References edited by Stanislav Sýkora
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Advance notices (years ≥ 2015). At page bottom, Related Works, HARDWARE, and LINKS:

18. McLoughlin Brian, *...


Year 2013


90. McRoberts Michael,  
   **Beginning Arduino**,  

91. Monk Simon,  
   **Programming Arduino Next Steps: Going Further with Sketches**,  

92. Norris Donald,  
   **Raspberry Pi Projects for the Evil Genius**,  

93. Nussey John,  
   **Arduino for Dummies**,  

94. Robinson Andrew, Cook Mike,  
   **Raspberry Pi Projects**,  

95. Scherz Paul, Monk Simon,  
   **Practical Electronics for Inventors**,  

96. Silverman Shea,  
   **Instant Raspberry Pi Gaming**,  

97. Smith Bruce,  

98. Smith Bruce,  
   **Raspberry Pi RISC OS System Programming Revealed**,  

99. Srivastav Vivek,  
   **Learning Science Using Robotics: Science Projects with Arduino**,  

100. Suehle Ruth, Callaway Tom,  

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**Year 2012**

101. Di Justo Patrick, Gertz Emily,  
    **Atmospheric Monitoring with Arduino**: Building Simple Devices to Collect Data About the Environment,  

102. Doukas Charalampos,  
    **Building Internet of Things with the Arduino**, Volume 1,  

103. Gertz Emily, Di Justo Patrick,  
    **Environmental Monitoring with Arduino**: Building Simple Devices to Collect Data About the World Around Us,  

104. Purdum Jack,  
    **Beginning C for Arduino: Learn C Programming for the Arduino**,  

105. Walker Chris,  
    **Getting Started with Netduino**,  

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**Year 2011**

106. Evans Brian,  
    **Beginning Arduino Programming**,  

107. Faludi Robert,  
    **Building Wireless Sensor Networks: with ZigBee, XBee, Arduino, and Processing**,  

108. Karvinen Tero, Karvinen Kimmo,  
    **Arduino Bots and Gadgets**: Six Embedded Projects with Open Source Hardware and Software,  

109. Margolis Michael,  
    **Arduino Cookbook**,  

110. Monk Simon,  
    **Programming Arduino: Getting Started with Sketches**,  

111. Monk Simon,  
    **Arduino + Android Projects for the Evil Genius**: Control Arduino with Your Smartphone or Tablet,  

112. Pfister Cuno,


Year 2010

14. Monk Simon,
30 Arduino Projects for the Evil Genius,

Year 2009

15. McRoberts M,
Arduino Starter Kit Manual,
Earthshine Design, 2015. Online >> FREE.

Related works

1. Bakos Jason D.,
Embedded Systems: ARM Programming and Optimization,
2. Platt Charles,
MAKE: More Electronics: Journey Deep into the World of Logic Chips, Amplifiers, Sensors, and Randomicity,
3. Ross Dickson, Lowe Doug,
Electronics All-in-One For Dummies,
4. Scherz Paul, Monk Simon,
Practical Electronics for Inventors,
5. Boysen Earl, Kybett Harry,
Complete Electronics Self-Teaching Guide with Projects,
6. Jepson Brian, Moskowitz Tyler, Hayes Gregory,
Learn to Solder: Tools and Techniques for Assembling Electronics,
7. Essick John,
Hands-On Introduction to LabVIEW for Scientists and Engineers,
8. Platt Charles,
Make: Electronics, Learning by Discovery,
9. Shamieh Cathleen, McComb Gordon,
Electronics For Dummies,

HARDWARE for generic and advanced TINKERING

1. Arduino Starter Kit (by Arduino, $88).
3. Arduino Uno Rev3 Starter Kit (by Vilros, $55).
5. Arduino ATmega2560-16AU board for Arduino (by Gikfun, $25).
9. PCDuino V3 1GB ARM Cortex A7 Dual-Core, compatible with Arduino start kit (by pcduino, $79).
10. Raspberry Pi 2 Model B (1 GB) Starter Kit (by Vilros, $70).
11. Raspberry Pi 2 (1 GB) Starter Kit (by CanaKit, $85).
12. Raspberry Pi 2 Model B Project Board - 1GB RAM - 900 MHz Quad-Core CPU (by Raspberry Pi, $42).
13. Banana Pi Dual Core Raspberry Pi-like development board with ARM Cortex-A7 (by Ewell, $43).
14. Banana Pi Pro Dual Core Mini PC with ARM Cortex-A7 (by Lemaker, $47).
15. Intel Galileo Gen 2 Board (by Intel, $104).
16. Intel Edison Breakout Board Kit (by Intel, $80).
17. Intel Edison Kit for Arduino (by Intel, $112).
Note: most of the sensors are on breakout boards compatible with, or adaptable to, any tinkering hardware. Even when specified 'for Raspberry Pi' or 'for Arduino', they can not be used across the whole range.

1. **Arduino compatible 37 sensor modules kit** (by Shanhai, $26).
2. **Accelerometer + Gyroscope**, 3 axis (by Kootek, $6).
3. **ADC**: 4x 16bit0.860 KSPS (by Adafruit, $15).
4. **ADC/DAC Expansion shield for Raspberry Pi**.
   - ADCs: 8x24 bit/30 KSPS; DACs: 2x16bit30MHz (by WaveShare, $37).
5. **Bluetooth Wireless Transceiver** for Arduino, Raspberry Pi; ... (by Kedsum, $10).
6. **Bluetooth Wireless Transceiver** for Arduino, Raspberry Pi; ... (by InnoGear, $9).
7. **Bluetooth USB Adapter**, for Raspberry Pi, and more (by JBTek, $9).
8. **Camera Module** for Arduino (by Yosoo, $10).
9. **Camera Board Module** Raspberry Pi 5 MP (by Raspberry Pi, $27).
10. **Camera: Smart Vision - Object Tracking** for Arduino, Raspberry Pi, BeagleBone Black (by Charmed Labs and CMU, $69). See also
11. **Distance sensor**, ultrasonic, 2pc, for Arduino (by SunFounder, $9).
12. **Distance sensor**, ultrasonic, 2pc, for Arduino (by DiYmill, $5).
13. **Ethernet Shield SODIAL** for Arduino Uno (by Toogoo, $7).
16. **GPS Breakout Board** for Raspberry Pi, Arduino, ... (by Adafruit, $42).
17. **GPS Antenna** with active aerial connector cable (by Neewer, $10).
18. **Jumper wires for breadboards and connectors**, 120 pc, 3 types (by Kalevel, $10).
19. **Jumper wires for breadboards**, 100 pc to 500 pc (Wosang, 100 pc $5).
20. **Jumper wires for breadboards**, 140 pc (by Cixi Wanjie Electronic, $7).
21. **Keyboard**, mini, wireless, remote, touchpad, for Raspberry Pi etc (by iPazzPort, $15).
22. **Kit: 37 sensors for Arduino, with extension prototyping board** (by SunFounder, $78).
23. **Kit: 37 sensors for Raspberry Pi, with extension prototyping board** (by SunFounder, $79).
24. **LED 8 colors, 5mm**, 80 pieces (by MicroVity, $4).
25. **Light sensor**, photoresistive, Arduino compatible (by Phantom YoYo, $8).
26. **Light sensor**, photoresistive, Arduino compatible (by Phantom YoYo, $7).
27. **Light sensor**, photoresistive, Arduino compatible (by RioRand, $8).
28. **Light sensor**, photodiode, calibrated, Arduino compatible (by Sunkee, $10).
29. **Magnetic field sensor**, magnetoresistive compass, 3 axis, max 800 uT (by JBTek, $6).
30. **Magnetic field switches**, A3144 Hall effect, 3 pins, unipolar (by Amico, 10pcs for $6).
31. **Memory Cards 16/32/64/128 GB, Micro SDHC, 48 MB/s** (by SanDisk, $9/26/28/76).
32. **Memory Cards 8/16/32/64/128/200 GB, Micro SDXC (ultra), 48 MB/s** (by SanDisk, $8/8/12/22/50/109).
33. **Motion sensor** for Arduino or Raspberry Pi (by Adafruit, $14).
34. **Pressure / Force sensor**, resistive (by Zhangminivi, $24).
35. **Relays**: 1-channel 5V/20mA drivers, AC250V/10A or DC30V/10A output universal (by Tolako, $4).
36. **Relays**: 2-channels 5V20mA drivers, AC250V/10A or DC30V/10A outputs universal (by Kootek, $6).
37. **Relays**: 4-channels 5V20mA drivers, AC250V/10A or DC30V/10A outputs universal (by SainSmart, $8).
38. **Relays**: 8-channels 5V20mA drivers, AC250V/10A or DC30V/10A outputs universal (by JBTek, $9).
39. **Relays**: 16-channels 5V/20mA drivers, AC250V/10A or DC30V/10A outputs universal (by SainSmart, $13).
40. **Soil moisture sensor**, high sensitivity, Arduino compatible (by Phantom YoYo, $8).
41. **Soil moisture sensor**, Arduino compatible (by Arrela, $6).
42. **Soil moisture sensor**, Arduino compatible (by Sunkee, $5).
43. **Soil temperature/humidity sensor** (by Adafruit, $55).
44. **Speach synthesis module**, Arduino XBee compatible (by Zhangminivi, $30).
45. **Sound sensor**, mini, Arduino compatible (by Phantom YoYo, $8).
46. **Temperature & humidity sensor**, Arduino compatible (by Phantom YoYo, $8).
47. **Temperature & humidity sensor**, 4pc GHT11, Arduino compatible (by Geetech, $8).
48. **Temperature & humidity sensor**, 4pc GHT11, Arduino compatible (by Vtech, $5).
49. **Touch screen**, 2.8 inch LCD, with SD card socket, for Arduino (by Arduino, $13).
50. **Tracking sensor**, Arduino compatible (by Phantom YoYo, $7).
51. **Vibration sensor**, piezo (by Zhangminivi, $14).
52. **Vibration switch** for Arduino, Raspberry Pi; ... (by MCP Technology Systems, $8).
53. **Weather station** WheaterPiArduino, for Arduino, Raspberry Pi; ... (by SwitchDoc Labs, $25).
54. **Weather: barometric pressure+temperature+altitude sensor** for Arduino, Raspberry Pi; ... (by Adafruit, $12).
55. **Wi-Fi USB Adapter**, universal, and ideal for Raspberry Pi ... (by Edimax, $9).
56. **Wireless Transceiver** for Arduino, Raspberry Pi; ... (by Addicore, $7).
ADVANCED TINKERING

1. Parallella-16 Desktop Computer (by Adapteva, $99).
2. Parallella-16 Micro-Server (by Adapteva, $75).
3. Radxa Rock Pro, quad-core 1.6GHz, 2G RAM, 8G FLASH, open source, single-board computer (by Radxa, $119).
4. Cubieboard3 allwinner A20, dual-core ARM Cortex-A7 2G DDR, 8G FLASH, open hardware, single-board computer mini PC, supports Linux, Android, full kit (by Cubieboard, $110).

FPGA boards and accessories for still another kind of advanced TINKERING

2. Xilinx Spartan 3E FPGA Starter board, very complete (by Digilent, $295).
3. Xilinx Spartan 3E FPGA 100K Development Kit, low cost Basys2 (by Digilent, $89).
4. Altera Cyclone II Fpga Starter Development Kit, very complete (by Altera, $300).
5. Altera Cyclone II Fpga Starter Development Kit (by Altera, $104).
6. Altera Cyclone II Fpga Mini Development Kit, low cost (by RioRand, $24).
7. Altera Cyclone III Fpga Development Board (by Clarity, $140).
8. Altera Cyclone IV Fpga Development Learning Board (clone, $60).
9. USB Blaster USB - JTAG cable for all Altera products (by RioRand, $14).

LINKS

1. Arduino home page
3. Arduino hardware on Amazon. Buy boards, shields, sensors, actuators, accessories, ...
4. Raspberry Pi home page
5. Raspberry Pi on Wikipedia
6. Raspberry Pi hardware on Amazon. Buy boards, sensors, actuators, accessories, ...
7. BeagleBoard home page
8. BeagleBoard on Wikipedia
9. BeagleBoard hardware on Amazon. Buy boards, sensors, actuators, accessories, ...
10. Intel Galileo Gen 2 home page
11. Intel Galileo on Arduino-Certified
13. Intel Edison home page
15. Intel Edison on Arduino-Certified. Buy boards, actuators, accessories, ...
16. Intel hardware on Amazon
17. AVR-Firmware Random Numbers Generation

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Want to play around with electronics? These are the top three programming languages you should know. Whether it is a Raspberry Pi, Arduino, or anything else, if you are planning to toy around with electronics on these, then you will at least be required to know a little bit of programming. A survey done by Hackster.io found out the three languages that the people thought were the best to learn.

According to the survey results, C and C++ were undoubtedly chosen as the preferred language to learn if you are into electronics tinkering. Trailing behind C is Python, which is then followed closely by Javascript, Java, and C#. Further, Arduino grabbed the top position in the hardware category, which was followed by Raspberry Pi and Particle. Ethical hacking is defined as making use of programming skills, so as to penetrate a computer system, and determine its vulnerabilities. The ethical hackers are skilled computer experts, often called as the “white hats”. As against non-ethical hackers or “black hats” that penetrate into a computer system and exploit it for their own personal gains or mischief, the “white hats” evaluate and point out the vulnerabilities of system software, and suggest system changes to make it less penetrable. Are you willing to become an ethical hacker? One of the best ways is to start reading books about hacking and try it yourself. Some of the best how to hack books that an aspiring ethical hacker must read are: Hacking: The Art of Exploitation, 2nd Edition.