

Panasonic Robot Error Code Manual

Want to develop novel robot applications, but don't know how to write a mapping or object-recognition system? You're not alone, but you're certainly not without help. By combining real-world examples with valuable knowledge from the Robot Operating System (ROS) community, this practical book provides a set of motivating recipes for solving specific robotics use cases. Ideal for enthusiasts, from students in robotics clubs to professional robotics scientists and engineers, each recipe describes a complete solution using ROS open source libraries and tools. You'll learn how to complete tasks described in the recipes, as well as how to configure and recombine components for other tasks. If you're familiar with Python, you're ready to go. Learn fundamentals, including key ROS concepts, tools, and patterns Program robots that perform an increasingly complex set of behaviors, using the powerful packages in ROS See how to easily add perception and navigation abilities to your robots Integrate your own sensors, actuators, software libraries, and even a whole robot into the ROS ecosystem Learn tips and tricks for using ROS tools and community resources, debugging robot behavior, and using C++ in ROS

Before the Internet became widely known as a global tool for terrorists, one perceptive U.S. citizen recognized its ominous potential. Armed with clear evidence of computer espionage, he began a highly personal quest to expose a hidden network of spies that threatened national security. But would the authorities back him up? Cliff Stoll's dramatic firsthand account is "a computer-age detective story, instantly fascinating [and] astonishingly gripping" (Smithsonian). Cliff Stoll was an astronomer turned systems manager at Lawrence Berkeley Lab when a 75-cent accounting error alerted him to the presence of an unauthorized user on his system. The hacker's code name was "Hunter"—a mysterious invader who managed to break into U.S. computer systems and steal sensitive military and security information. Stoll began a one-man hunt of his own: spying on the spy. It was a dangerous game of deception, broken codes, satellites, and missile bases—a one-man sting operation that finally gained the attention of the CIA . . . and ultimately trapped an international spy ring fueled by cash, cocaine, and the KGB.

The complex material histories of the Nintendo Entertainment System platform, from code to silicon, focusing on its technical constraints and its expressive affordances. In the 1987 Nintendo Entertainment System videogame Zelda II: The Adventure of Link, a character famously declared: I AM ERROR. Puzzled players assumed that this cryptic message was a programming flaw, but it was actually a clumsy Japanese-English translation of "My Name is Error," a benign programmer's joke. In I AM ERROR Nathan Altice explores the complex material histories of the Nintendo Entertainment System (and its Japanese predecessor, the Family Computer), offering a detailed analysis of its programming and engineering, its expressive affordances, and its cultural significance. Nintendo games were rife with mistranslated texts, but, as Altice explains, Nintendo's translation challenges were not just linguistic but also material, with consequences beyond simple misinterpretation. Emphasizing the technical and material evolution of Nintendo's first cartridge-based platform, Altice describes the development of the Family Computer (or Famicom) and its computational architecture; the "translation" problems faced while adapting the Famicom for the U.S. videogame market as the redesigned Entertainment System; Nintendo's breakthrough console title Super Mario Bros. and its remarkable software innovations; the introduction of Nintendo's short-lived proprietary disk format and the design repercussions on The Legend of Zelda; Nintendo's efforts to extend their console's lifespan through cartridge augmentations; the Famicom's Audio Processing Unit (APU) and its importance for the chiptunes genre; and the emergence of software emulators and the new kinds of play they enabled.

Fully updated for ASP.NET MVC 3. Delve into the features, principles, and pillars of the ASP.NET MVC framework—deftly guided by web development luminary Dino Esposito. ASP.NET MVC forces developers to think in terms of distinct components—Model, View, Controller—that make it easier to manage application complexity, while allowing strict control over the markup. Plunge into the framework's internal mechanics and gain perspectives on how to use this programming model versus Web Forms, and begin building your own MVC-based applications quickly.

Strategies and Practices for a Global Open Economy

Amateur Radio

Robotics Product Database

Transaction Cost Management

Biologically Inspired Robotics

A Guide for Policymakers

Building Smart Web 2.0 Applications

Want to tap the power behind search rankings, product recommendations, social bookmarking, and online matchmaking? This fascinating book demonstrates how you can build Web 2.0 applications to mine the enormous amount of data created by people on the Internet. With the sophisticated algorithms in this book, you can write smart programs to access interesting datasets from other web sites, collect data from users of your own applications, and analyze and understand the data once you've found it. Programming Collective Intelligence takes you into the world of machine learning and statistics, and explains how to draw conclusions about user experience, marketing, personal tastes, and human behavior in general -- all from information that you and others collect every day. Each algorithm is described clearly and concisely with code that can immediately be used on your web site, blog, Wiki, or specialized application. This book explains: Collaborative filtering techniques that enable online retailers to recommend products or media Methods of clustering to detect groups of similar items in a large dataset Search engine features -- crawlers, indexers, query engines, and the PageRank algorithm Optimization algorithms that search millions of possible solutions to a problem and choose the best one Bayesian filtering, used in spam filters for classifying documents based on word types and other features Using decision trees not only to make predictions, but to model the way decisions are made Predicting numerical values rather than classifications to build price models Support vector machines to match people in online dating sites Non-negative matrix factorization to find the independent features in a dataset Evolving intelligence for problem solving -- how a computer develops its skill by improving its own code the more it plays a game Each chapter includes exercises for extending the algorithms to make them more powerful. Go beyond simple database-backed applications and put the wealth of Internet data to work for you. "Bravo! I cannot think of a better way for a developer to first learn these algorithms and methods, nor can I think of a better way for me (an old AI dog) to reinvigorate my knowledge of the details." -- Dan Russell, Google "Toby's book does a great job of breaking down the complex subject matter of machine-learning algorithms into practical, easy-to-understand examples that can be directly applied to analysis of social interaction across the Web today. If I had this book two years ago, it would have saved precious time going down some fruitless paths." -- Tim Wolters, CTO, Collective Intellect

Robotics Products DatabasePopular Science

* A much-needed clearinghouse for information on amateur and educational robotics, containing over 2,500 listings of robot suppliers, including mail order and local area businesses * Contains resources for both common and hard-to-find parts and supplies * Features dozens of "sidebars" to clarify essential robotics technologies * Provides original articles on various robot-building topics

An exploration of embodied intelligence and its implications points toward a theory of intelligence in general; with case studies of intelligent systems in ubiquitous computing, business and management, human memory, and robotics. How could the body influence our thinking when it seems obvious that the brain controls the body? In How the Body Shapes the Way We Think, Rolf Pfeifer and Josh Bongard demonstrate that thought is not independent of the body but is tightly constrained, and at the same time enabled, by it. They argue that the kinds of thoughts we are capable of have their foundation in our embodiment—in our morphology and the material properties of our bodies. This crucial notion of embodiment underlies fundamental changes in the field of artificial intelligence over the past two decades, and Pfeifer and Bongard use the basic methodology of artificial intelligence—"understanding by building"—to describe their insights. If we understand how to design and build intelligent systems, they reason, we will better understand intelligence in general. In accessible, nontechnical language, and using many examples, they introduce the basic concepts by building on recent developments in robotics, biology, neuroscience, and psychology to outline a possible theory of intelligence. They illustrate applications of such a theory in ubiquitous computing, business and management, and the psychology of human memory. Embodied intelligence, as described by Pfeifer and Bongard, has important implications for our understanding of both natural and artificial intelligence.

Arduino: A Quick-Start Guide

The Blissful Sleep, Greater Focus, Limitless Presence, and Deep Connection Awaiting Us All on the Other Side of Alcohol

Robotics in Germany and Japan

Manufacturing Review

Autonomous Vehicle Technology

RFID Handbook

How the Body Shapes the Way We Think

This book gathers high-quality, peer-reviewed research papers presented at the Second International Conference on Computer Science, Engineering and Education Applications (ICSEEA2019), held in Kiev, Ukraine on 26–27 January 2019, and jointly organized by the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" and the International Research Association of Modern Education and Computer Science. The papers discuss state-of-the-art topics and advances in computer science; neural networks; pattern recognition; engineering techniques; genetic coding systems; deep learning and its medical applications; and knowledge representation and its applications in education. Given its scope, the book offers an excellent resource for researchers, engineers, management practitioners, and graduate and undergraduate students interested in computer science and its applications in engineering and education.

Safe, efficient, code-compliant electrical installations are made simple with the latest publication of this widely popular resource. Like its highly successful previous editions, the National Electrical Code 2011 spiral bound version combines solid, thorough, research-based content with the tools you need to build an in-depth understanding of the most important topics. New to the 2011 edition are articles including first-time Article 399 on Outdoor, Overhead Conductors with over 600 volts, first-time Article 694 on Small Wind Electric Systems, first-time Article 840 on Premises Powered Broadband Communications Systems, and more. This spiralbound version allows users to open the code to a certain page and easily keep the book open while referencing that page. The National Electrical Code is adopted in all 50 states, and is an essential reference for those in or entering careers in electrical design, installation, inspection, and safety.

* Dr. Mark Tilden, the inventor of Robosapien,has provided the author with exclusive access to the Robosapien v2 program. * Provides access to the 20-plus "Easter eggs" (the hidden secrets) programmed into Robosapien. * Over 2 million Robosapiens have sold since 2004.

This book gives clear and effective instructions, stuffed with practical examples, to build your own fun, stunning and highly-interactive openFrameworks applications. Each chapter is focused differently and has a new theme to it,This book targets visual artists, designers, programmers and those interested in creative coding by getting started with openFrameworks. This book will help you understand the capabilities of openFrameworks to help you create visually stunning and fully interactive applications. You should have a basic knowledge of object oriented programming, such as C++, Java, Python, ActionScript 3, etc.

National Electrical Code

Speech and Audio Processing for Coding, Enhancement and Recognition

Ethics for the Information Age

Thomas Register

Robotic Welding, Intelligence and Automation

Good Economics for Hard Times

Expanded Cinema

The winners of the Nobel Prize show how economics, when done right, can help us solve the thorniest social and political problems of our day. Figuring out how to deal with today's critical economic problems is perhaps the great challenge of our time. Much greater than space travel or perhaps even the next revolutionary medical breakthrough, what is at stake is the whole idea of the good life as we have known it. Immigration and inequality, globalization and technological disruption, slowing growth and accelerating climate change--these are sources of great anxiety across the world, from New Delhi and Dakar to Paris and Washington, DC. The resources to address these challenges are there--what we lack are ideas that will help us jump the wall of disagreement and distrust that divides us. If we succeed, history will remember our era with gratitude; if we fail, the potential losses are incalculable. In this revolutionary book, renowned MIT economists Abhijit V. Banerjee and Esther Duflo take on this challenge, building on cutting-edge research in economics explained with lucidity and grace. Original, provocative, and urgent, Good Economics for Hard Times makes a persuasive case for an intelligent interventionism and a society built on compassion and respect. It is an extraordinary achievement, one that shines a light to help us appreciate and understand our precariously balanced world.

Would life be better without alcohol? It's the nagging question more and more of us are finding harder to ignore, whether we have a "problem" with alcohol or not. After all, we yoga. We green juice. We meditate. We self-care. And yet, come the end of a long work day, the start of a weekend, an awkward social situation, we drink. One glass of wine turns into two turns into a bottle. In the face of how we care for ourselves otherwise, it's hard to avoid how alcohol really makes us feel... terrible. How different would our lives be if we stopped drinking on autopilot? If we stopped drinking altogether? Really different, it turns out. Really better. Frank, funny, and always judgment free, Sober Curious is a bold guide to choosing to live hangover-free, from Ruby Warrington, one of the leading voices of the new sobriety movement. Drawing on research, expert interviews, and personal narrative, Sober Curious is a radical take down of the myths that keep so many of us drinking. Inspiring, timely, and blame free, Sober Curious is both conversation starter and handbook--essential reading that empowers readers to transform their relationship with alcohol, so we can lead our most fulfilling lives.

Robotic engineering inspired by biology--biomimetics--has many potential applications: robot snakes can be used for rescue operations in disasters, snake-like endoscopes can be used in medical diagnosis, and artificial muscles can replace damaged muscles to recover the motor functions of human limbs. Conversely, the application of robotics technology to our understanding of biological systems and behaviors--biorobotic modeling and analysis--provides unique research opportunities: robotic manipulation technology with optical tweezers can be used to study the cell mechanics of human red blood cells, a surface electromyography sensing system can help us identify the relation between muscle forces and hand movements, and mathematical models of brain circuitry may help us understand how the cerebellum achieves movement control. Biologically Inspired Robotics contains cutting-edge material--considerably expanded and with additional analysis--from the 2009 IEEE International Conference on Robotics and Biomimetics (ROBIO). These 16 chapters cover both biomimetics and biorobotic modeling/analysis, taking readers through an exploration of biologically inspired robot design and control, micro/nano bio-robotic systems, biological measurement and actuation, and applications of robotics technology to biological problems. Contributors examine a wide range of topics, including: A method for controlling the motion of a robotic snake The design of a bionic fitness cycle inspired by the jaguar The use of autonomous robotic fish to detect pollution A noninvasive brain-activity scanning method using a hybrid sensor A rehabilitation system for recovering motor function in human hands after injury Human-like robotic eye and head movements in human-machine interactions A state-of-the-art resource for graduate students and researchers.

Popular Science gives our readers the information and tools to improve their technology and their world. The core belief that Popular Science and our readers share: The future is going to be better, and science and technology are the driving forces that will help make it better.

Fundamentals and Applications in Contactless Smart Cards, Radio Frequency Identification and Near-Field Communication

5-6 November 1987, Cambridge, Massachusetts

Young Readers Edition

Nuts & Volts Magazine

A Practical Introduction to the Robot Operating System

International Business Management

Programming Microsoft ASP.NET MVC

This is the third revised edition of the established and trusted RFID Handbook; the most comprehensive introduction to radio frequency identification (RFID) available. This essential new edition contains information on electronic product code (EPC) and the EPC global network, and explains near-field communication (NFC) in depth. It includes revisions on chapters devoted to the physical principles of RFID systems and microprocessors, and supplies up-to-date details on relevant standards and regulations. Taking into account critical modern concerns, this handbook provides the latest information on: the use of RFID in ticketing and electronic passports; the security of RFID systems, explaining attacks on RFID systems and other security matters, such as transponder emulation and cloning, defence using cryptographic methods, and electronic article surveillance; frequency ranges and radio licensing regulations. The text explores schematic circuits of simple transponders and readers, and includes new material on active and passive transponders, ISO/IEC 18000 family, ISO/IEC 15691 and 15692. It also describes the technical limits of RFID systems. A unique resource offering a complete overview of the large and varied world of RFID, Klaus Finkenzeller's volume is useful for end-users of the technology as well as practitioners in auto ID and IT designers of RFID products. Computer and electronics engineers in security system development, microchip designers, and materials handling specialists benefit from this book, as do automation, industrial and transport engineers. Clear and thorough explanations also make this an excellent introduction to the topic for graduate level students in electronics and industrial engineering design. Klaus Finkenzeller was awarded the Fraunhofer-Smart Card Prize 2008 for the second edition of this publication, which was celebrated for being an outstanding contribution to the smart card field.

Germany and Japan are two of the worldwide leading countries in robotics research. Robotics as a key technology introduces technical as well as philosophical and cultural challenges. How can we use robots that have a human-like appearance in everyday life? Are there limits to technology? What are the cultural similarities and differences between Germany and Japan? These are some of the questions which are discussed in the book. Five chapters comprehend an intercultural and interdisciplinary framework including current research fields like Roboethics, Hermeneutics of Technologies, Technology Assessment, Robotics in Japanese Popular Culture and Music Robots. Contributions on cultural interrelations, technical visions and essays round out the content of this book.

By his early thirties, Paul Allen was a world-famous billionaire-and that was just the beginning. In 2007 and 2008, Time named Paul Allen, the cofounder of Microsoft, one of the hundred most influential people in the world. Since he made his fortune, his impact has been felt in science, technology, business, medicine, sports, music, and philanthropy. His passion, curiosity, and intellectual rigor-combined with the resources to launch and support new initiatives-have literally changed the world. In 2009 Allen discovered that he had lymphoma, lending urgency to his desire to share his story for the first time. In this classic memoir, Allen explains how he has solved problems, what he's learned from his many endeavors-both the triumphs and the failures-and his compelling vision for the future. He reflects candidly on an extraordinary life. The book also features previously untold stories about everything from the true origins of Microsoft to Allen's role in the dawn of private space travel (with SpaceShipOne) and in discoveries at the frontiers of brain science. With honesty, humor, and insight, Allen tells the story of a life of ideas made real.

Intel® Galileo and Intel® Galileo Gen 2: API Features and Arduino Projects for Linux Programmers provides detailed information about Intel® Galileo and Intel® Galileo Gen 2 boards for all software developers interested in Arduino and the Linux platform. The book covers the new Arduino APIs and is an introduction for developers on natively using Linux. Author Manoel Carlos Ramon is a member of the Intel Galileo development team; in this book he draws on his practical experience in working on the Galileo project as he shares the team's findings, problems, fixes, workarounds, and techniques with the open source community. His areas of expertise are wide-ranging, including Linux-embedded kernel and device drivers, C/C++, Java, OpenGL, Assembler, Android NDK/SDK/ADK, and 2G/3G/4G modem integration. He has more than 17 years of experience in research and development of mobile devices and embedded circuits. His personal blog about programming is BytesThink (www.bytesthink.com).

Sober Curious

Programming Collective Intelligence

Robot Manipulator Control

Cool Projects for Open Source Hardware

RWIA'2014

Mobile Robots II

Automotive Engineering International

The automotive industry appears close to substantial change engendered by "self-driving" technologies. This technology offers the possibility of significant benefits to social welfare--saving lives; reducing crashes, congestion, fuel consumption, and pollution; increasing mobility for the disabled; and ultimately improving land use. This report is intended as a guide for state and federal policymakers on the many issues that this technology raises.

Now a Netflix film starring and directed by Chiwetel Ejiofor, this is a gripping memoir of survival and perseverance about the heroic young inventor who brought electricity to his Malawian village. When a terrible drought struck William Kamkwamba's tiny village in Malawi, his family lost all of the season's crops, leaving them with nothing to eat and nothing to sell. William began to explore science books in his village library, looking for a solution. There, he came up with the idea that would change his family's life forever: he could build a windmill. Made out of scrap metal and old bicycle parts, William's windmill brought electricity to his home and helped his family pump the water they needed to farm the land. Retold for a younger audience, this exciting memoir shows how, even in a

desperate situation, one boy's brilliant idea can light up the world. Complete with photographs, illustrations, and an epilogue that will bring readers up to date on William's story, this is the perfect edition to read and share with the whole family.

Widely praised for its balanced treatment of computer ethics, Ethics for the Information Age offers a modern presentation of the moral controversies surrounding information technology. Topics such as privacy and intellectual property are explored through multiple ethical theories, encouraging readers to think critically about these issues and to make their own ethical decisions. This textbook explores the theoretical and practical aspects of managing international business operations while also dealing with multi-cultural, multi-national and global issues of managing business expansion beyond the domestic market. A second, revised edition of Managing Internationally: Succeeding in a Culturally Diverse World, each chapter contains up-to-date material, in-depth coverage of topics, visual aids (i.e., charts, tables, etc.), and vignettes, making this new edition engaging, visually appealing and easily accessible for students taking International Business Management courses. The contents of this textbook are separated into four parts. Part one offers introductory information on the scope and importance of international business management as well as the social and ethical challenges. Part two covers cultural and behavioral topics. Part three discusses the strategic and operational aspects of international business management. Part four explores human resources and labor relations. To assist students, each chapter starts a preview section which includes an outline of the chapter indicating the important aspects along with a brief description of the major issues. Following the preview is a vignette that encapsulates the crux of the chapter, often presented in an amusing and engaging manner. To further help students focus on key issues, the text includes the list of useful business cases to which students can refer. To assist professors in teaching from this book, ancillary teaching materials such as sample syllabi, slides, tests and answer keys will be available for download.

The Robosapien Companion

Tips, Tricks, and Hacks

The Boy Who Harnessed the Wind

Succeeding in a Culturally Diverse World

Robotics Products Database

Idea Man

Theory and Practice

This book describes the basic principles underlying the generation, coding, transmission and enhancement of speech and audio signals, including advanced statistical and machine learning techniques for speech and speaker recognition with an overview of the key innovations in these areas. Key research undertaken in speech coding, speech enhancement, speech recognition, emotion recognition and speaker diarization are also presented, along with recent advances and new paradigms in these areas.

The primary aim of this volume is to provide researchers and engineers from both academic and industry with up-to-date coverage of new results in the field of robotic welding, intelligent systems and automation. The book is mainly based on papers selected from the 2014 International Conference on Robotic Welding, Intelligence and Automation (RWIA'2014), held Oct. 25-27, 2014, at Shanghai, China. The articles show that the intelligentized welding manufacturing (IWM) is becoming an inevitable trend with the intelligentized robotic welding as the key technology. The volume is divided into four logical parts: Intelligent Techniques for Robotic Welding, Sensing of Arc Welding Processing, Modeling and Intelligent Control of Welding Processing, as well as Intelligent Control and its Applications in Engineering.

The second edition of this handbook provides a state-of-the-art overview on the various aspects in the rapidly developing field of robotics. Reaching for the human frontier, robotics is vigorously engaged in the growing challenges of new emerging domains. Interacting, exploring, and working with humans, the new generation of robots will increasingly touch people and their lives. The credible prospect of practical robots among humans is the result of the scientific endeavour of a half a century of robotic developments that established robotics as a modern scientific discipline. The ongoing vibrant expansion and strong growth of the field during the last decade has fueled this second edition of the Springer Handbook of Robotics. The first edition of the handbook soon became a landmark in robotics publishing and won the American Association of Publishers PROSE Award for Excellence in Physical Sciences & Mathematics as well as the organization's Award for Engineering & Technology. The second edition of the handbook, edited by two internationally renowned scientists with the support of an outstanding team of seven part editors and more than 200 authors, continues to be an authoritative reference for robotics researchers, newcomers to the field, and scholars from related disciplines. The contents have been restructured to achieve four main objectives: the enlargement of foundational topics for robotics, the enlightenment of design of various types of robotic systems, the extension of the treatment on robots moving in the environment, and the enrichment of advanced robotics applications. Further to an extensive update, fifteen new chapters have been introduced on emerging topics, and a new generation of authors have joined the handbook's team. A novel addition to the second edition is a comprehensive collection of multimedia references to more than 700 videos, which bring valuable insight into the contents. The videos can be viewed directly augmented into the text with a smartphone or tablet using a unique and specially designed app. Springer Handbook of Robotics Multimedia Extension Portal: <http://handbookofrobotics.org/>

Arduino is an open-source platform that makes DIY electronics projects easier than ever. Gone are the days when you had to learn electronics theory and arcane programming languages before you could even get an LED to blink. Now, with this new edition of the bestselling Arduino: A Quick-Start Guide, readers with no electronics experience can create their first gadgets quickly. This book is up-to-date for the new Arduino Zero board, with step-by-step instructions for building a universal remote, a motion-sensing game controller, and many other fun, useful projects. This Quick-Start Guide is packed with fun, useful devices to create, with step-by-step instructions and photos throughout. You'll learn how to connect your Arduino to the Internet and program both client and server applications. You'll build projects such as your own motion-sensing game controller with a three-axis accelerometer, create a universal remote with an Arduino and a few cheap parts, build your own burglar alarm that emails you whenever someone's moving in your living room, build binary dice, and learn how to solder. In one of several new projects in this edition, you'll create your own video game console that you can connect to your TV set. This book is completely updated for the new Arduino Zero board and the latest advances in supporting software and tools for the Arduino. Sidebars throughout the book point you to exciting real-world projects using the Arduino, exercises extend your skills, and "What If It Doesn't Work" sections help you troubleshoot common problems. With this book, beginners can quickly join the worldwide community of hobbyists and professionals who use the Arduino to prototype and develop fun, useful inventions. What You Need: This is the full list of all parts you'd need for all projects in the book; some of these are provided as part of various kits that are available on the web, or you can purchase individually. Sources include adafruit.com, makershed.com, radioshack.com, sparkfun.com, and mouser.com. Please note we do not support or endorse any of these vendors, but we list them here as a convenience for you. Arduino Zero (or Uno or Duemilanove or Diecimila) board USB cable Half-size breadboard Pack of LEDs (at least 3, 10 or more is a good idea) Pack of 100 ohm, 10k ohm, and 1k ohm resistors Four pushbuttons Breadboard jumper wire / connector wire Parallax Ping))) sensor Passive Infrared sensor An infrared LED A 5V servo motor Analog Devices TMP36 temperature sensor ADXL335 accelerometer breakout board 6 pin 0.1" standard header (might be included with the ADXL335) Nintendo Nunchuk Controller Arduino Ethernet shield Arduino Proto shield and a tiny breadboard (optional but recommended) Piezo speaker/buzzer (optional) Tilt sensor (optional) A 25-30 Watts soldering iron with a tip (preferably 1/16") A soldering stand and a sponge A standard 60/40 solder (rosin-core) spool for electronics work

Practical Arduino

Advances in Computer Science for Engineering and Education II

Programming Robots with ROS

CUCKOO'S EGG

I Am Error

Popular Science

A Memoir by the Cofounder of Microsoft

All organizations, institutions, business processes, markets and strategies have one aim in common: the reduction of transaction costs. This aim is pursued relentlessly in practice, and has been perceived to bring about drastic changes, especially in the recent global market and the cyber economy.

This book analyzes and describes "transactions" as a model, on the basis of which organizations, institutions and business processes can be appropriately shaped. It tracks transaction costs to enable a scientific approach instead of a widely used "state-of-the-art" approach, working to bridge the gap between theory and practice. This open access book analyzes and describes "transactions" as a model...

Robot Manipulator Control offers a complete survey of control systems for serial-link robot arms and acknowledges how robotic device performance hinges upon a well-developed control system. Containing over 750 essential equations, this thoroughly up-to-date Second Edition, the book explicates theoretical and mathematical requisites for controls design and summarizes current techniques in computer simulation and implementation of controllers. It also addresses procedures and issues in computed-torque, robust, adaptive, neural network, and force control. New chapters relay practical information on commercial robot manipulators and devices and cutting-edge methods in neural network control.

Fiftieth anniversary reissue of the founding media studies book that helped establish media art as a cultural category. First published in 1970, Gene Youngblood's influential Expanded Cinema was the first serious treatment of video, computers, and holography as cinematic technologies. Long considered the bible for media artists, Youngblood's insider account of 1960s counterculture and the birth of cybernetics remains a mainstay reference in today's hypermediated digital world. This fiftieth anniversary edition includes a new Introduction by the author that offers conceptual tools for understanding the sociocultural and sociopolitical realities of our present world. A unique eyewitness account of burgeoning experimental film and the birth of video art in the late 1960s, this far-ranging study traces the evolution of cinematic language to the end of fiction, drama, and realism. Vast in scope, its prescient formulations include "the paleocybernetic age," "intermedia," the "artist as design scientist," the "artist as ecologist," "synaesthetics and kinesthetics," and "the technosphere: man/machine symbiosis." Outstanding works are analyzed in detail. Methods of production are meticulously described, including interviews with artists and technologists of the period, such as Nam June Paik, Jordan Belson, Andy Warhol, Stan Brakhage, Carolee Schneemann, Stan VanDerBeek, Les Levine, and Frank Gillette. An inspiring Introduction by the celebrated polymath and designer R.

Buckminster Fuller—a perfectly cut gem of countercultural thinking in itself—places Youngblood's radical observations in comprehensive perspective. Providing an unparalleled historical documentation, Expanded Cinema clarifies a chapter of countercultural history that is still not fully represented in the arthistorical record half a century later. The book will also inspire the current generation of artists working in ever-newer expansions of the cinematic environment and will prove invaluable to all who are concerned with the technologies that are reshaping the nature of human communication.

Create your own Arduino-based designs, gain in-depth knowledge of the architecture of Arduino, and learn the user-friendly Arduino language all in the context of practical projects that you can build yourself at home. Get hands-on experience using a variety of projects and recipes for everything from home automation to test equipment. Arduino has taken off as an incredibly popular building block among ubicomp (ubiquitous computing) enthusiasts, robotics hobbyists, and DIY home automation developers. Authors Jonathan Oxer and Hugh Blemings provide detailed instructions for building a wide range of both practical and fun Arduino-related projects, covering areas such as hobbies, automotive, communications, home automation, and instrumentation. Take Arduino beyond "blink" to a wide variety of projects from simple to challenging Hands-on recipes for everything from home automation to interfacing with your car engine management system Explanations of techniques and references to handy resources for ubiquitous computing projects Supplementary material includes a circuit schematic reference, introductions to a range of electronic engineering principles and general hints & tips. These combine with the projects themselves to make Practical Arduino: Cool Projects for Open Source Hardware an invaluable reference for Arduino users of all levels. You'll learn a wide variety of techniques that can be applied to your own projects.

Over 2,500 Sources for Robot Parts

API Features and Arduino Projects for Linux Programmers

Administrative Management

Mastering openFrameworks: Creative Coding Demystified

Robot Builder's Sourcebook

Springer Handbook of Robotics