House Cleaning Service Mopify

Yoga for Runners offers dozens of specific poses exclusively intended for runners to strengthen their muscles, improve mobility, and reduce the risk of injury. Step-by-step instructions, photos, and 13 sequences make this a practical, easy-to-follow training guide that will produce results.
Dwarfs your fear towards complicated mathematical derivations and proofs. Experience Kalman filter with hands-on examples to grasp the essence. A book long awaited by anyone who could not dare to put their first step into Kalman filter. The author presents Kalman filter and other useful filters without complicated mathematical derivation and proof but with hands-on examples in MATLAB that will guide you step-by-step. The book starts with recursive filter and basics of Kalman filter, and gradually expands to application for nonlinear systems through extended and unscented Kalman filters. Also, some topics on frequency analysis including complementary filter are covered. Each chapter is balanced with theoretical background for absolute beginners and practical MATLAB examples to experience the principles explained. Once grabbing the book, you will notice it is not fearful but even enjoyable to learn Kalman filter.
A Bayesian and Optimization Perspective

The first edition, published in 1973, has become a classicreference in the field. Now with the second edition,

readers willfind information on key new topics such as neural networks andstatistical pattern recognition, the theory of machine learning,and the theory of invariances. Also included are worked examples,comparisons between different methods, extensive graphics, expandedexercises and computer project topics. An Instructor's Manual presenting detailed solutions to all theproblems in the book is available from the Wiley editorialdepartment.

This book is a comprehensive guide to machine learning with worked examples in MATLAB. It starts with an overview of the history of Artificial Intelligence and automatic control and how the field of machine learning grew from these. It provides descriptions of all major areas in machine learning. The book reviews commercially available packages for machine learning and shows how they fit into the field. The book then shows how MATLAB can be used to solve machine learning problems and how MATLAB graphics can enhance the programmer's understanding of the results and help users of their software grasp the results. Machine Learning can be very mathematical. The mathematics for each area is introduced in a clear and concise form so that even casual readers can understand the math. Readers from all areas of engineering will see connections to what they know and will learn new technology. The book then provides complete solutions in MATLAB for several important problems in machine learning including face identification, autonomous driving, and data classification. Full source code is provided for all of the examples and applications in the book. What you'll learn: An overview of the field of machine learning Commercial and open source packages in MATLAB How to use MATLAB for programming and building machine learning applications

MATLAB graphics for machine learning Practical real world examples in MATLAB for major applications of machine learning in big data Who is this book for: The primary audiences are engineers and engineering students wanting a comprehensive and practical introduction to machine learning. Kalman Filter for Beginners

Changes in Education under China's Market Economy Machine Learning: A Bayesian and Optimization Perspective, 2nd edition, gives a unified perspective on machine learning by covering both pillars of supervised learning, namely regression and classification. The book starts with the basics, including mean square, least squares and maximum likelihood methods, ridge regression, Bayesian decision theory classification, logistic regression, and decision trees. It then progresses to more recent techniques, covering sparse modelling methods, learning in reproducing kernel Hilbert spaces and support vector machines, Bayesian inference with a focus on the EM algorithm and its approximate inference variational versions, Monte Carlo methods, probabilistic graphical models focusing on Bayesian networks, hidden Markov models and particle filtering. Dimensionality reduction and latent variables modelling are also considered in depth. This palette of techniques concludes with an extended chapter on neural networks and deep learning architectures. The book also covers the fundamentals of statistical parameter estimation, Wiener and Kalman filtering, convexity and convex optimization, including a chapter on stochastic approximation and the gradient descent family of algorithms, presenting related online learning techniques as well as concepts and algorithmic versions for distributed optimization. Focusing on the physical

reasoning behind the mathematics, without sacrificing rigor, all the various methods and techniques are explained in depth, supported by examples and problems, giving an invaluable resource to the student and researcher for understanding and applying machine learning concepts. Most of the chapters include typical case studies and computer exercises, both in MATLAB and Python. The chapters are written to be as self-contained as possible, making the text suitable for different courses: pattern recognition, statistical/adaptive signal processing, statistical/Bayesian learning, as well as courses on sparse modeling, deep learning, and probabilistic graphical models. New to this edition: Complete re-write of the chapter on Neural Networks and Deep Learning to reflect the latest advances since the 1st edition. The chapter, starting from the basic perceptron and feed-forward neural networks concepts, now presents an in depth treatment of deep networks, including recent optimization algorithms, batch normalization, regularization techniques such as the dropout method, convolutional neural networks, recurrent neural networks, attention mechanisms, adversarial examples and training, capsule networks and generative architectures, such as restricted Boltzman machines (RBMs), variational autoencoders and generative adversarial networks (GANs). Expanded treatment of Bayesian learning to include nonparametric Bayesian methods, with a focus on the Chinese restaurant and the Indian buffet processes. Presents the physical reasoning, mathematical modeling and algorithmic implementation of each method Updates on the latest trends, including sparsity, convex analysis and optimization, online distributed algorithms, learning in RKH spaces, Bayesian inference, graphical and hidden

Markov models, particle filtering, deep learning, dictionary learning and latent variables modeling Provides case studies on a variety of topics, including protein folding prediction, optical character recognition, text authorship identification, fMRI data analysis, change point detection, hyperspectral image unmixing, target localization, and more

A practical introduction perfect for final-year undergraduate and graduate students without a solid background in linear algebra and calculus.

Raspberry Pi Zero W Wireless Projects

A Probabilistic Perspective

Now in its third edition, this classic book is widely considered the leading text on Bayesian methods, lauded for its accessible, practical approach to analyzing data and solving research problems. Bayesian Data Analysis, Third Edition continues to take an applied approach to analysis using up-to-date Bayesian methods. The authors—all leaders in the statistics community—introduce basic concepts from a data-analytic perspective before presenting advanced methods. Throughout the text, numerous worked examples drawn from real applications and research emphasize the use of Bayesian inference in practice. New to the Third Edition Four new chapters on nonparametric modeling Coverage of weakly informative priors and boundary-avoiding priors Updated discussion of cross-validation and predictive information criteria Improved convergence monitoring and effective sample size

calculations for iterative simulation Presentations of Hamiltonian Monte Carlo, variational Bayes, and expectation propagation New and revised software code The book can be used in three different ways. For undergraduate students, it introduces Bayesian inference starting from first principles. For graduate students, the text presents effective current approaches to Bayesian modeling and computation in statistics and related fields. For researchers, it provides an assortment of Bayesian methods in applied statistics. Additional materials, including data sets used in the examples, solutions to selected exercises, and software instructions, are available on the book's web page.
Build DIY wireless projects using the Raspberry Pi Zero W board About This Book Explore the functionalities of the Raspberry Pi Zero W with exciting projects Master the wireless features (and extend the use cases) of this $10 chip A project-based guide that will teach you to build simple yet exciting projects using the Raspberry Pi Zero W board Who This Book Is For If you are a hobbyist or an enthusiast and want to get your hands on the latest Raspberry Pi Zero W to build exciting wireless projects, then this book is for you. Some prior programming knowledge, with some experience in electronics, would be useful. What You Will Learn Set up a router and connect Raspberry Pi Zero W to the internet Create a two-

wheel mobile robot and control it from your Android device Build an automated home bot assistant device Host your personal website with the help of Raspberry Pi Zero W Connect Raspberry Pi Zero to speakers to play your favorite music Set up a web camera connected to the Raspberry Pi Zero W and add another security layer to your home automation In Detail The Raspberry Pi has always been the go–to, lightweight ARM-based computer. The recent launch of the Pi Zero W has not disappointed its audience with its $10 release. "W" here stands for Wireless, denoting that the Raspberry Pi is solely focused on the recent trends for wireless tools and the relevant use cases. This is where our book—Raspberry Pi Zero W Wireless Projects—comes into its own. Each chapter will help you design and build a few DIY projects using the Raspberry Pi Zero W board. First, you will learn how to create a wireless decentralized chat service (client-client) using the Raspberry Pi's features?. Then you will make a simple two-wheel mobile robot and control it via your Android device over your local Wi-Fi network. Further, you will use the board to design a home bot that can be connected to plenty of devices in your home. The next two projects build a simple web streaming security layer using a web camera and portable speakers that will adjust the playlist according to your mood. You will also build a home server to host files and

websites using the board. Towards the end, you will create free Alexa voice recognition software and an FPV Pi Camera, which can be used to monitor a system, watch a movie, spy on something, remotely control a drone, and more. By the end of this book, you will have developed the skills required to build exciting and complex projects with Raspberry Pi Zero W. Style and approach A step-by-step guide that will help you design and create simple yet exciting projects using the Raspberry Pi Zero W board.

MIMO-OFDM Wireless Communications with MATLAB

Bayesian Reasoning and Machine Learning

MIMO-OFDM is a key technology for next-generation cellular communications (3GPP-LTE, Mobile WiMAX, IMT-Advanced) as well as wireless LAN (IEEE 802.11a, IEEE 802.11n), wireless PAN (MB-OFDM), and broadcasting (DAB, DVB, DMB). In MIMO-OFDM Wireless Communications with MATLAB®, the authors provide a comprehensive introduction to the theory and practice of wireless channel modeling, OFDM, and MIMO, using MATLAB® programs to simulate the various techniques on MIMO-OFDM systems. One of the only books in the area dedicated to explaining simulation aspects Covers implementation to help cement the key concepts Uses

materials that have been classroom-tested in numerous universities Provides the analytic solutions and practical examples with downloadable MATLAB® codes Simulation examples based on actual industry and research projects Presentation slides with key equations and figures for instructor use MIMO-OFDM Wireless Communications with MATLAB® is a key text for graduate students in wireless communications. Professionals and technicians in wireless communication fields, graduate students in signal processing, as well as senior undergraduates majoring in wireless communications will find this book a practical introduction to the MIMO-OFDM techniques. Instructor materials and MATLAB® code examples available for download at www.wiley.com/go/chomimo With a new generation of services and frameworks, frontend and mobile developers can use their existing skill set to build full stack applications by leveraging the cloud. Developers can build robust applications with production-ready features such as authentication, APIs, data layers, machine learning, chatbots, and AR scenes more easily than ever by taking advantage of these new serverless and cloud technologies. This practical guide explains how. Nader Dabit, developer advocate at Amazon Web

Services, shows developers how to build full stack applications using React, AWS, GraphQL, and the Amplify Framework. You'll learn how to create and incorporate services into your client applications while exploring general best practices, deployment strategies, continuous integration and delivery, and rich media management along the way. Learn how to build applications that solve real problems Understand what is (and is not) possible when using these technologies Examine how authentication works—and learn the difference between authentication and authorization Discover how serverless functions work and why they're important Use GraphQL in your application—and learn why it's important Learn how to build full stack applications on AWS

MATLAB Machine Learning
Yoga for Runners

Raspberry Pi Zero W Wireless ProjectsPackt Publishing Ltd
Fuelled by forces of globalization, China has gradually shifted from a centrally planned economy to a socialist market economy. Under the market economy China has experienced a massive and protracted economic boom. It is not clear however whether recent economic changes have brought the same miracle to education in China. Spotlight on China brings together established and emerging scholars from China and internationally in a dialogue about the

profound social and economic transformation that has resulted from the market economy and its concomitant impact on education in China. The book covers a wide range of topics, including: • Market economy and curriculum reform• Teaching under China's market economy• Changes in higher education• Transitions from education to work • Market economy and social inequality With its broad scope and fresh critical perspectives, this collection offers a most contemporary and comprehensive analysis of possibly the largest education system in the world. Lessons learned from the China experiment will inform researchers and educators about social and educational reforms in other countries which are undergoing similar fundamental changes. Spotlight on China provides a state of the art picture: dynamic, partial, full of contradictions and tensions, and, as we speak, in movement and local reconfiguration." – Allan Luke, Queensland University of Technology. "The book moves social science research on China's education another step forward by refining the balance between the viability of mainstream western concepts and the analytical possibilities of creating a new scholarship based on a deeper understanding of the historically grounded realities of contemporary Chinese education." – Gerard A. Postiglione, The University of Hong Kong"
Spotlight on China
Pattern Classification

A comprehensive introduction to machine learning that uses probabilistic models and inference as a unifying approach. Today's Web-enabled deluge of

electronic data calls for automated methods of data analysis. Machine learning provides these, developing methods that can automatically detect patterns in data and then use the uncovered patterns to predict future data. This textbook offers a comprehensive and self-contained introduction to the field of machine learning, based on a unified, probabilistic approach. The coverage combines breadth and depth, offering necessary background material on such topics as probability, optimization, and linear algebra as well as discussion of recent developments in the field, including conditional random fields, L1 regularization, and deep learning. The book is written in an informal, accessible style, complete with pseudo-code for the most important algorithms. All topics are copiously illustrated with color images and worked examples drawn from such application domains as biology, text processing, computer vision, and robotics. Rather than providing a cookbook of different heuristic methods, the book stresses a principled model-based approach, often using the language of graphical models to specify models in a concise and intuitive way. Almost all the models described have been implemented in a MATLAB software package—PMTK (probabilistic modeling toolkit)—that is freely available online. The book is suitable for upper-level undergraduates with an introductory-level college math background and

beginning graduate students.
With MATLAB Examples
Bayesian Data Analysis, Third Edition