Computer Vision

Von Simon J. D. Prince
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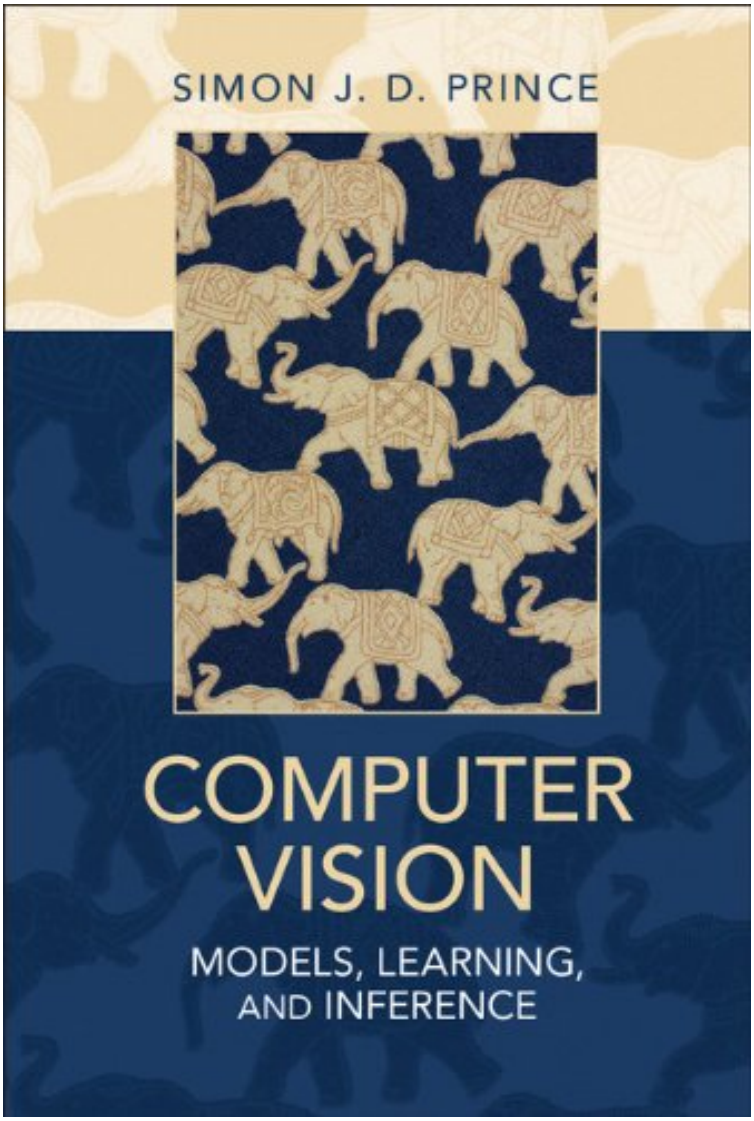

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Von Simon J. D. Prince : Computer Vision before purchasing it in order to gage whether or not it would be worth my time, and all praised Computer Vision:

KundenrezensionenHilfreichste Kundenrezensionen2 von 2 Kunden fanden die folgende Rezension hilfreich. Eine prima Einfhrung in die Materie!Von JoachimIch habe fr meine Masterarbeit einen tiefer gehenden Einstieg in die Wahrscheinlichkeitsrechnung gesucht und wurde von diesem Buch nicht enttuscht. Die erste Hlfte des Buches ist den Grundlagen der Wahrscheinlichkeitsrechnung gewidmet. Diese ist sehr ausfhrlich und verstndlich geschrieben.Es folgt ein Einstieg in die wichtigsten Themen der Computer Vision. Es werden Grundlagen wie das Lochkameramodell

sowie die wichtigsten state-of-the-art Themen (z.B. SIFT-Features, ...) behandelt. Ich habe diesen Teil auf Grund meiner Vorkenntnisse nur berflogen, er macht jedoch einen guten Eindruck auf mich. Die letzten Kapitel behandelt weiterfhrende Anwendungsmglichkeiten, welche beide Themenkomplexe kombinieren.Mein persnliches Fazit: Wer einen guten Einstieg oder ein gutes Nachschlagewerk aus dem Bereich der probabilistischen Computer Vision sucht ist mit diesem Buch gut beraten. Es ist ausfhrlich und verstndlich geschrieben und hat mir den Weg in das Thema geebnet.

KurzbeschreibungThis modern treatment of computer vision focuses on learning and inference in probabilistic models as a unifying theme. It shows how to use training data to learn the relationships between the observed image data and the aspects of the world that we wish to estimate, such as the 3D structure or the object class, and how to exploit these relationships to make new inferences about the world from new image data. With minimal prerequisites, the book starts from the basics of probability and model fitting and works up to real examples that the reader can implement and modify to build useful vision systems. Primarily meant for advanced undergraduate and graduate students, the detailed methodological presentation will also be useful for practitioners of computer vision. Covers cutting-edge techniques, including graph cuts, machine learning and multiple view geometry A unified approach shows the common basis for solutions of important computer vision problems, such as camera calibration, face recognition and object tracking More than 70 algorithms are described in sufficient detail to implement More than 350 full-color illustrations amplify the text The treatment is self-contained, including all of the background mathematics Additional resources at www.computervisionmodels.comPressestimmen'Computer vision and machine learning have married and this book is their child. It gives the machine learning fundamentals you need to participate in current computer vision research. It's really a beautiful book, showing everything clearly and intuitively. I had lots of 'aha!' moments as I read through the book. This is an important book for computer vision researchers and students, and I look forward to teaching from it.' William T. Freeman, Massachusetts Institute of Technology'With clarity and depth, this book introduces the mathematical foundations of probabilistic models for computer vision, all with well-motivated, concrete examples and applications. Most modern computer vision texts focus on visual tasks; Prince's beautiful new book is natural complement, focusing squarely on fundamental techniques, emphasizing models and associated methods for learning and inference. I think every serious student and researcher will find this book valuable. I've been using draft chapters of this remarkable book in my vision and learning courses for more than two years. It will remain a staple of mine for years to come.' David J. Fleet, University of Toronto'This book addresses the fundamentals of how we make progress in this challenging and exciting field. I look forward to many decades with [this book] on my shelf, or indeed, I suspect, open on my desktop.' Andrew Fitzgibbon, from the Foreword'Prince's magnum opus provides a fully probabilistic framework for understanding modern computer vision. With straightforward descriptions, insightful figures, example applications, exercises, background mathematics, and pseudocode, this book is self-contained and has all that is needed to explore this fascinating discipline.' Roberto Cipolla, University of Cambridge'The author's goal, as stated in the preface, is to provide a book that focuses on the models involved, and I think the book has succeeded in doing that. I learned quite a bit and would recommend this text highly to the motivated, mathematically mature reader.' Jeffrey Putnam, Computing sber das ProduktWith minimal prerequisites, the book starts from the basics of probability and model fitting and works up to real examples that the reader can implement and modify to build useful vision systems. Primarily meant for advanced undergraduate and graduate students, the detailed methodological presentation will also be useful for practitioners of computer vision.