OpenCV By Example

Von Prateek Joshi, David Millan Escriva, Vinicius Godoy
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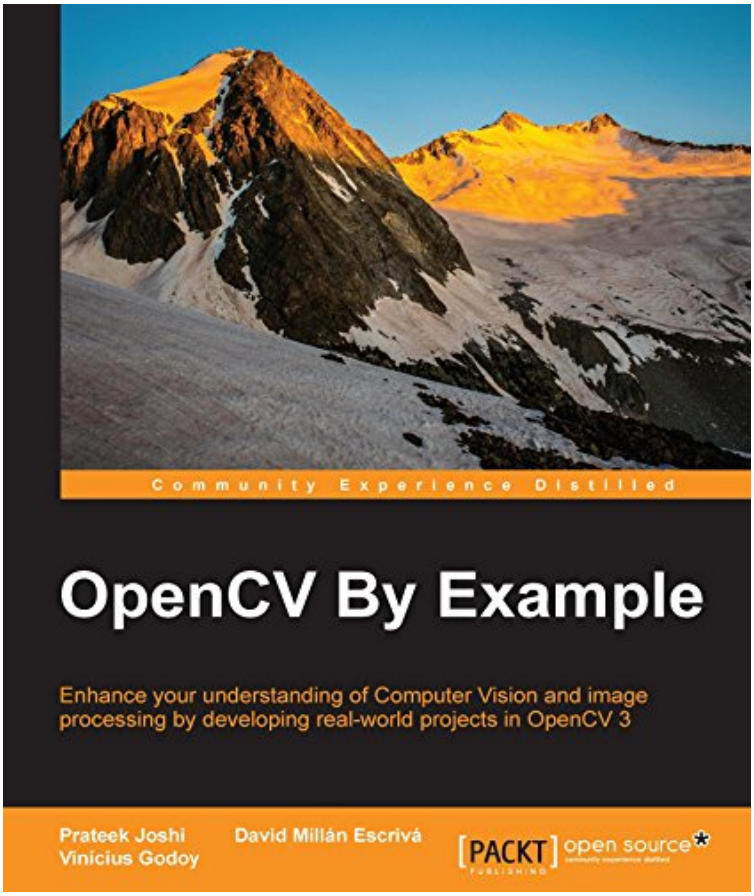

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Von Prateek Joshi, David Millan Escriva, Vinicius Godoy : OpenCV By Example before purchasing it in order to gage whether or not it would be worth my time, and all praised OpenCV By Example:

KundenrezensionenHilfreichste Kundenrezensionen0 von 0 Kunden fanden die folgende Rezension hilfreich. helpfull for beginners and prosVon Nikolaus GradwohlI had the opportunity to review the book "OpenCV by Example" written by Prateek Joshi, David Millan Escriva and Vinicius Godoy for Packt Publishing. The books helps you to integrate OpenCV 3 into your projects in the beginning by providing step by step instructions but also provides detailed background infor mations on various areas of computer vision. If you need to digg even deeper you also get links to the original scientific research papers. the areas covered range from computer vision basics like filtering or image manipulation to complex areas like object tracking or text recognition. So if you need to add vision to your robotics project, mobile application, media art project, desktop application, ... and always wondered how to do it this is a book you should read.

KurzbeschreibungEnhance your understanding of Computer Vision and image processing by developing real-world projects in OpenCV 3About This BookGet to grips with the basics of Computer Vision and image processingThis is a step-by-step guide to developing several real-world Computer Vision projects using OpenCV 3This book takes a special focus on working with Tesseract OCR, a free, open-source library to recognize text in imagesWho This Book Is ForIf you are a software developer with a basic understanding of Computer Vision and image processing and want to develop interesting Computer Vision applications with Open CV, this is the book for you. Knowledge of C++ is required.What You Will LearnInstall OpenCV 3 on your operating systemCreate the required CMake scripts to compile the C++ application and manage its dependenciesGet to grips with the Computer Vision workflows and understand the basic image matrix format and filtersUnderstand the segmentation and feature extraction techniquesRemove backgrounds from a static scene to identify moving objects for video surveillanceTrack different objects in a live video using various techniquesUse the new OpenCV functions for text detection and recognition with TesseractIn DetailOpen CV is a cross-platform, free-for-use library that is primarily used for real-time Computer Vision and image processing. It is considered to be one of the best open source libraries that helps developers focus on constructing complete projects on image processing, motion detection, and image segmentation.Whether you are completely new to the concept of Computer Vision or have a basic understanding of it, this book will be your guide to understanding the basic OpenCV concepts and algorithms through amazing real-world examples and projects.Starting from the installation of OpenCV on your system and understanding the basics of image processing, we swiftly move on to creating optical flow video analysis or text recognition in complex scenes, and will take you through the commonly used Computer Vision techniques to build your own Open CV projects from scratch.By the end of this book, you will be familiar with the basics of Open CV such as matrix operations, filters, and histograms, as well as more advanced concepts such as segmentation, machine learning, complex video analysis, and text recognition.Style and approachThis book is a practical guide with lots of tips, and is closely focused on developing Computer vision applications with OpenCV. Beginning with the fundamentals, the complexity increases with each chapter. Sample applications are developed throughout the book that you can execute and use in your own projects.KurzbeschreibungEnhance your understanding of Computer Vision and image processing by developing real-world projects in OpenCV 3About This BookGet to grips with the basics of Computer Vision and image processingThis is a step-by-step guide to developing several real-world Computer Vision projects using OpenCV 3This book takes a special focus on working with Tesseract OCR, a free, open-source library to recognize text in imagesWho This Book Is ForIf you are a software developer with a basic understanding of Computer Vision and image processing and want to develop interesting Computer Vision applications with Open CV, this is the book for you. Knowledge of C++ is required.What You Will LearnInstall OpenCV 3 on your operating systemCreate the required CMake scripts to compile the C++ application and manage its dependenciesGet to grips with the Computer Vision workflows and understand the basic image matrix format and filtersUnderstand the segmentation and feature extraction techniquesRemove backgrounds from a static scene to identify moving objects for video surveillanceTrack different objects in a live video using various techniquesUse the new OpenCV functions for text detection and recognition with TesseractIn DetailOpen CV is a cross-platform, free-for-use library that is primarily used for real-time Computer Vision and image processing. It is considered to be one of the best open source libraries that helps developers focus on constructing complete projects on image processing, motion detection, and image segmentation.Whether you are completely new to the concept of Computer Vision or have a basic understanding of it, this book will be your guide to understanding the basic OpenCV concepts and algorithms through amazing real-world examples and projects.Starting from the installation of OpenCV on your system and understanding the basics of image processing, we swiftly move on to creating optical flow video analysis or text recognition in complex scenes, and will take you through the commonly used Computer Vision techniques to build your own Open CV projects from scratch.By the end of this book, you will be familiar with the basics of Open CV such as matrix operations, filters, and histograms, as well as more advanced concepts such as segmentation, machine learning, complex video analysis, and text recognition.Style and approachThis book is a practical guide with lots of tips, and is closely focused on developing Computer vision applications with OpenCV. Beginning with the fundamentals, the complexity increases with each chapter. Sample applications are developed throughout the book that you can execute and use in your own projects.ber den Autor und weitere MitwirkendePrateek Joshi Prateek Joshi is a Computer Vision researcher and published author. He has over eight years of experience in this field with a primary focus on content-based analysis and deep learning. His work in this field has resulted in multiple patents, tech demos, and research papers at major IEEE conferences. He is the author of OpenCV with Python By Example, Packt Publishing. He has won many hackathons using a wide variety of technologies related to image recognition. His blog has been visited by users in more than 200 countries, and he has been featured as a guest author in prominent tech magazines. He enjoys blogging on topics, such as artificial intelligence, abstract mathematics, and cryptography. You can visit his blog at www.prateekvjoshi.com. He is an avid coder who is passionate about building game-changing products. He is particularly interested in intelligent algorithms that can automatically understand the content to produce scene descriptions in terms of constituent objects. He graduated from the University of Southern California and has worked

for such companies as Nvidia, Microsoft Research, Qualcomm, and a couple of early stage start-ups in Silicon Valley. You can learn more about him on his personal website at www.prateekj.com.David Millan Escriva David Millan Escriva was eight years old when he wrote his first program on an 8086 PC with BASIC language, which enabled the 2D plotting of BASIC equations. He started with his computer development relationship and created many applications and games. In 2005, he completed his studies in IT from the Universitat Politecnica de Valencia with honors in human-computer interaction supported by Computer Vision with OpenCV (v0.96). He had a final project based on this subject and published it on HCI Spanish Congress. In 2014, he completed his Master's degree in artificial intelligence, computer graphics, and pattern recognition, focusing on pattern recognition and Computer Vision. He participated in Blender source code, an open source and 3D-software project, and worked in his first commercial movie, PlumiferosAventuras voladoras, as a computer graphics software developer. David now has more than 13 years of experience in IT, with more than nine years of experience in Computer Vision, computer graphics, and pattern recognition, working on different projects and start-ups, applying his knowledge of Computer Vision, optical character recognition, and augmented reality. He is the author of the DamilesBlog (http://blog.damiles.com), where he publishes research articles and tutorials on OpenCV, Computer Vision in general, and optical character recognition algorithms. He is the co-author of Mastering OpenCV with Practical Computer Vision Projects Book and also the reviewer of GnuPlot Cookbook by Lee Phillips, OpenCV Computer Vision with Python by Joseph Howse, Instant Opencv Starter by Jayneil Dalal and Sohil Patel, all published by Packt Publishing.Vinicius Godoy Vinicius Godoy is a computer graphics university professor at PUCPR. He started programming with C++ 18 years ago and ventured into the field of computer gaming and computer graphics 10 years ago. His former experience also includes working as an IT manager in document processing applications in Sinax, a company that focuses in BPM and ECM activities, building games and applications for Positivo Informatica, including building an augmented reality educational game exposed at CEBIT and network libraries for Siemens Enterprise Communications (Unify). As part of his Master's degree research, he used Kinect, OpenNI, and OpenCV to recognize Brazilian sign language gestures. He is currently working with medical imaging systems for his PhD thesis. He was also a reviewer of the OpenNI Cookbook, Packt Publishing. He is also a game development fan, having a popular site entirely dedicated to the field called Ponto V (http://www.pontov.com.br). He is the cofounder of a startup company called Blackmuppet. His fields of interest includes image processing, Computer Vision, design patterns, and multithreaded applications.