Computational Photography: Methods and Applications (Digital Imaging and Computer Vision)

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision)

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision)

Computational photography refers broadly to imaging techniques that enhance or extend the capabilities of digital photography. This new and rapidly developing research field has evolved from computer vision, image processing, computer graphics and applied optics?and numerous commercial products capitalizing on its principles have already appeared in diverse market applications, due to the gradual migration of computational algorithms from computers to imaging devices and software.

Computational Photography: Methods and Applications provides a strong, fundamental understanding of theory and methods, and a foundation upon which to build solutions for many of today's most interesting and challenging computational imaging problems. Elucidating cutting-edge advances and applications in digital imaging, camera image processing, and computational photography, with a focus on related research challenges, this book:

- Describes single capture image fusion technology for consumer digital cameras
- Discusses the steps in a camera image processing pipeline, such as visual data compression, color correction and enhancement, denoising, demosaicking, super-resolution reconstruction, deblurring, and high dynamic range imaging
- Covers shadow detection for surveillance applications, camera-driven document rectification, bilateral filtering and its applications, and painterly rendering of digital images
- Presents machine-learning methods for automatic image colorization and digital face beautification
- Explores light field acquisition and processing, space-time light field rendering, and dynamic view synthesis with an array of cameras

Because of the urgent challenges associated with emerging digital camera applications, image processing methods for computational photography are of paramount importance to research and development in the imaging community. Presenting the work of leading experts, and edited by a renowned authority in digital color imaging and camera image processing, this book considers the rapid developments in this area and addresses very particular research and application problems. It is ideal as a stand-alone professional reference for design and implementation of digital image and video processing tasks, and it can also be used to support graduate courses in computer vision, digital imaging, visual data processing, and computer graphics, among others.

Download and Read Free Online Computational Photography: Methods and Applications (Digital Imaging and Computer Vision)

Jarred Chisolm:

The book Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) can give more knowledge and information about everything you want. Exactly why must we leave a good thing like a book Computational Photography: Methods and Applications (Digital Imaging and Computer Vision)? Several of you have a different opinion about guide. But one aim which book can give many information for us. It is absolutely proper. Right now, try to closer with your book. Knowledge or information that you take for that, you could give for each other; you are able to share all of these. Book Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) has simple shape however, you know: it has great and big function for you. You can appearance the enormous world by wide open and read a reserve. So it is very wonderful.

Wendell Nadeau:

As people who live in the modest era should be revise about what going on or data even knowledge to make them keep up with the era that is certainly always change and move ahead. Some of you maybe can update themselves by reading books. It is a good choice for you but the problems coming to you is you don't know what kind you should start with. This Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) is our recommendation so you keep up with the world. Why, since this book serves what you want and wish in this era.

Barbara Jackson:

As a college student exactly feel bored to reading. If their teacher questioned them to go to the library or make summary for some e-book, they are complained. Just very little students that has reading's internal or real their leisure activity. They just do what the instructor want, like asked to the library. They go to at this time there but nothing reading really. Any students feel that looking at is not important, boring and also can't see colorful photographs on there. Yeah, it is to be complicated. Book is very important for you personally. As we know that on this era, many ways to get whatever we want. Likewise word says, ways to reach Chinese's country. Therefore , this Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) can make you really feel more interested to read.

Frank Foushee:

What is your hobby? Have you heard which question when you got students? We believe that that problem was given by teacher on their students. Many kinds of hobby, Everybody has different hobby. And also you know that little person such as reading or as reading through become their hobby. You should know that reading is very important along with book as to be the matter. Book is important thing to include you knowledge, except your personal teacher or lecturer. You discover good news or update concerning something by book. Many kinds of books that can you choose to adopt be your object. One of them is niagra

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision).

Download and Read Online Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) #UNXCJ6EVQTL

Read Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) for online ebook

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) books to read online.

Online Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) ebook PDF download

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) Doc

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) Mobipocket

Computational Photography: Methods and Applications (Digital Imaging and Computer Vision) EPub