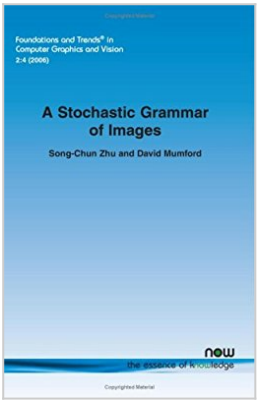

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision)

By Song-Chun Zhu, David Mumford

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford

A Stochastic Grammar of Images is the first book to provide a foundational review and perspective of grammatical approaches to computer vision. In its quest for a stochastic and context sensitive grammar of images, it is intended to serve as a unified frame-work of representation, learning, and recognition for a large number of object categories. It starts out by addressing the historic trends in the area and overviewing the main concepts: such as the and-or graph, the parse graph, the dictionary and goes on to learning issues, semantic gaps between symbols and pixels, dataset for learning and algorithms. The proposal grammar presented integrates three prominent representations in the literature: stochastic grammars for composition, Markov (or graphical) models for contexts, and sparse coding with primitives (wavelets). It also combines the structure-based and appearance based methods in the vision literature. At the end of the review, three case studies are presented to illustrate the proposed grammar. A Stochastic Grammar of Images is an important contribution to the literature on structured statistical models in computer vision.

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision)

By Song-Chun Zhu, David Mumford

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford

A Stochastic Grammar of Images is the first book to provide a foundational review and perspective of grammatical approaches to computer vision. In its quest for a stochastic and context sensitive grammar of images, it is intended to serve as a unified frame-work of representation, learning, and recognition for a large number of object categories. It starts out by addressing the historic trends in the area and overviewing the main concepts: such as the and-or graph, the parse graph, the dictionary and goes on to learning issues, semantic gaps between symbols and pixels, dataset for learning and algorithms. The proposal grammar presented integrates three prominent representations in the literature: stochastic grammars for composition, Markov (or graphical) models for contexts, and sparse coding with primitives (wavelets). It also combines the structure-based and appearance based methods in the vision literature. At the end of the review, three case studies are presented to illustrate the proposed grammar. A Stochastic Grammar of Images is an important contribution to the literature on structured statistical models in computer vision.

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford Bibliography

- Sales Rank: #5912417 in Books
- Published on: 2007-08-31
- Original language: English
- Number of items: 1
- Dimensions: 9.21" h x .25" w x 6.14" l, .39 pounds
- Binding: Paperback
- 120 pages

Editorial Review

Users Review

From reader reviews:

Donald Rose:

This A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) book is not ordinary book, you have after that it the world is in your hands. The benefit you get by reading this book is definitely information inside this book incredible fresh, you will get details which is getting deeper you read a lot of information you will get. This kind of A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) without we comprehend teach the one who reading through it become critical in thinking and analyzing. Don't become worry A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) can bring whenever you are and not make your bag space or bookshelves' turn out to be full because you can have it in your lovely laptop even cell phone. This A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) having fine arrangement in word in addition to layout, so you will not truly feel uninterested in reading.

Shawna Vaughn:

The e-book untitled A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) is the publication that recommended to you to see. You can see the quality of the book content that will be shown to a person. The language that article author use to explained their way of doing something is easily to understand. The writer was did a lot of study when write the book, therefore the information that they share for your requirements is absolutely accurate. You also will get the e-book of A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) from the publisher to make you considerably more enjoy free time.

Mary Molinari:

The reason? Because this A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) is an unordinary book that the inside of the guide waiting for you to snap this but latter it will shock you with the secret it inside. Reading this book beside it was fantastic author who have write the book in such awesome way makes the content on the inside easier to understand, entertaining method but still convey the meaning totally. So , it is good for you for not hesitating having this anymore or you going to regret it. This book will give you a lot of gains than the other book possess such as help improving your proficiency and your critical thinking method. So , still want to delay having that book? If I have been you I will go to the publication store hurriedly.

James Donofrio:

Are you kind of active person, only have 10 or 15 minute in your moment to upgrading your mind ability or thinking skill even analytical thinking? Then you are experiencing problem with the book in comparison with can satisfy your limited time to read it because all this time you only find guide that need more time to be read. A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) can be your answer because it can be read by an individual who have those short free time problems.

Read A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford for online ebook

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford 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 A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford books to read online.

Online A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford ebook PDF download

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford Doc

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford Mobipocket

A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford EPub

619D04ZVG3I: A Stochastic Grammar of Images (Foundations and Trends(r) in Computer Graphics and Vision) By Song-Chun Zhu, David Mumford