# Exploring Computer Science with Scheme (Undergraduate Texts in Computer Science)

*Von Oliver Grillmeyer*
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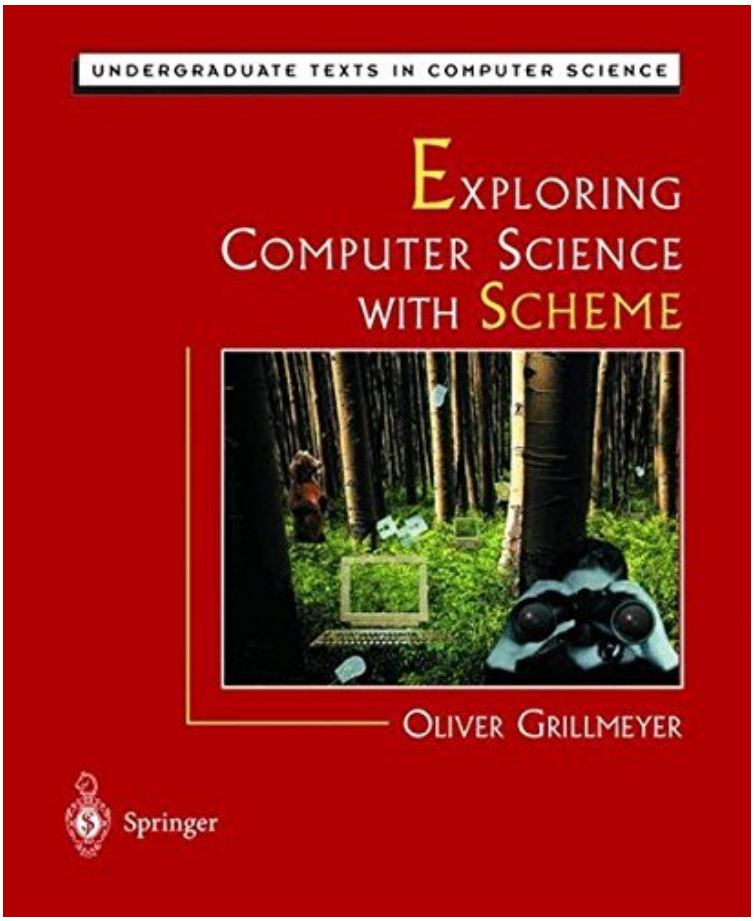




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**Von Oliver Grillmeyer : Exploring Computer Science with Scheme (Undergraduate Texts in Computer Science)** before purchasing it in order to gage whether or not it would be worth my time, and all praised Exploring Computer Science with Scheme (Undergraduate Texts in Computer Science):

KundenrezensionenHilfreichste Kundenrezensionen0 von 0 Kunden fanden die folgende Rezension hilfreich. excellent university teaching toolVon danlim@cory.eecs.berkeley.eduI was a former teaching assistant this past summer for a lower division computer science course at UC Berkeley. We used this book as our primary text. From several semesters of teaching introductory computer science courses I can say that this book has proven to be an indispensible item for me. Ranging from concise writing to thought provoking questions, it is an excellent introduction to future

computer scientists. I recommend this to anyone.

KurzbeschreibungA presentation of the central and basic concepts, techniques, and tools of computer science, with the emphasis on presenting a problem-solving approach and on providing a survey of all of the most important topics covered in degree programmes. Scheme is used throughout as the programming language and the author stresses a functional programming approach to create simple functions so as to obtain the desired programming goal. Such simple functions are easily tested individually, which greatly helps in producing programs that work correctly first time. Throughout, the author aids to writing programs, and makes liberal use of boxes with "Mistakes to Avoid." Programming examples include: * abstracting a problem; * creating pseudo code as an intermediate solution; * top-down and bottom-up design; * building procedural and data abstractions; * writing progams in modules which are easily testable. Numerous exercises help readers test their understanding of the material and develop ideas in greater depth, making this an ideal first course for all students coming to computer science for the first time.KurzbeschreibungA presentation of the central and basic concepts, techniques, and tools of computer science, with the emphasis on presenting a problem-solving approach and on providing a survey of all of the most important topics covered in degree programmes. Scheme is used throughout as the programming language and the author stresses a functional programming approach to create simple functions so as to obtain the desired programming goal. Such simple functions are easily tested individually, which greatly helps in producing programs that work correctly first time. Throughout, the author aids to writing programs, and makes liberal use of boxes with "Mistakes to Avoid." Programming examples include: * abstracting a problem; * creating pseudo code as an intermediate solution; * top-down and bottom-up design; * building procedural and data abstractions; * writing progams in modules which are easily testable. Numerous exercises help readers test their understanding of the material and develop ideas in greater depth, making this an ideal first course for all students coming to computer science for the first time.Synopsis The aim of this textbook is to present the central and basic concepts, techniques, and tools of computer science. The emphasis is on presenting a problem-solving approach and on providing a survey of all of the most important topics covered in computer science degree programmes. Scheme is used throughout as the programming language and the author stresses a functional programming approach which concentrates on the creation of simple functions that are composed to obtain the desired programming goal. Such simple functions are easily tested individually. This greatly helps in producing programs that work right first time.Throughout, the author presents techniques to aid in the writing of programs and makes liberal use of boxes which present "Mistakes to Avoid." Many programming examples are discussed in detail which illustrate general approaches to programming. These include: abstracting a problem; creating pseudo code as an intermediate solution; top-down and bottom-up design; building procedural and data abstractions; and writing progams in modules which are easily testable.Numerous exercises help the readers test their understanding of the material and develop some ideas in greater depth. As a result this text will make an ideal first course for all students coming to computer science for the first time.