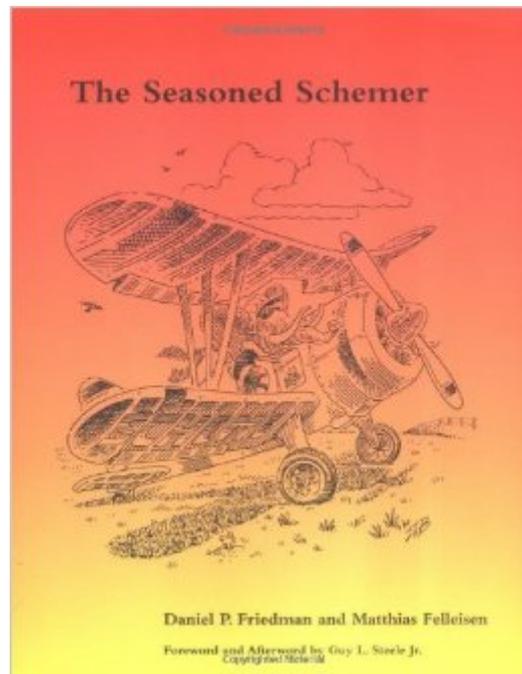# The Seasoned Schemer (MIT Press)

Synopsis

The notion that "thinking about computing is one of the most exciting things the human mind can do" sets both The Little Schemer (formerly known as The Little LISPer) and its new companion volume, The Seasoned Schemer, apart from other books on LISP. The authors' enthusiasm for their subject is compelling as they present abstract concepts in a humorous and easy-to-grasp fashion. Together, these books will open new doors of thought to anyone who wants to find out what computing is really about. The Little Schemer introduces computing as an extension of arithmetic and algebra; things that everyone studies in grade school and high school. It introduces programs as recursive functions and briefly discusses the limits of what computers can do. The authors use the programming language Scheme, and interesting foods to illustrate these abstract ideas. The Seasoned Schemer informs the reader about additional dimensions of computing: functions as values, change of state, and exceptional cases. The Little LISPer has been a popular introduction to LISP for many years. It had appeared in French and Japanese. The Little Schemer and The Seasoned Schemer are worthy successors and will prove equally popular as textbooks for Scheme courses as well as companion texts for any complete introductory course in Computer Science.

Book Information

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Customer Reviews

This book is the second half of "The Little Schemer". It expects you to have mastered the previous volume, so it starts fast and picks up speed from there.It covers a lot of ground in a slim volume (just

as in "The Little Schemer"). This book introduces the concepts of closures and call-with-current-continuation (among other things).As with "The Little Schemer", this book's strength is in its socratic instruction method. Lessons are written and illustrated as conversations between the reader and the instructor (in question/answer format). While this sounds strange, it is actually surprisingly effective as a means of learning the material. It might seem somewhat like rote instruction, but it can often frame foreign concepts in a rememberable fashion.Neither of these books require much in the way of background or familiarity with the material. They were created as a means of teaching non-programmers to program in Scheme. However, I think they hold value for trained programmers as well.

The Seasoned Schemer continues where the The Little Schemer - 4th Edition (a truly marvelous book) left off. It aims to extend the readers understanding of programming techniques and the Scheme programming language. It covers many interesting topics like memoization, the interchangeability of functions and data, mutable state, and programming with continuations.Unfortunately The Seasoned Schemer has a strong inclination towards inside jokes for people who already know the material. In the process of charming the experienced reader it risks losing novices. How does a reference to Alonzo Church using call-with-current-continuation tell the novice that letcc is not available in many Scheme implementations? Why is there no real explanation of when and where to apply the "12th commandment" (use letrec to remove arguments that do not change for recursive application)? Why does a discussion about using closures and functions to model data structures devolve into trivia about circular lists? The text often seems like a sequence of such programming gems littered in a book with few clues for eyes unaccustomed to recognizing gems.People familiar with the subject matter will enjoy the charming and concise discussion of fundamental (and often difficult) ideas. Other readers are probably better served by reading a proper text book on programming in Scheme. It's a real pity though, because once you get the inside jokes this really is a fine book! Just don't use it as your first book on programming in LISP like languages.

The book picks up and demonstrates using to letcc (call with current continuation) to speed up delivery of results or to simply forget pending applications and return to an outer list of s-expressions. Additionally there is more using of letrec and the demonstration of of using set!. The final chapter once again looks at creating the language within the language but this time including 'define' and using set! to update closures. If you felt reasonably confident with the Little Schemer

you should be fine reading this extension book, and you will likely be much more confident with any lisp like languages having read it.

The Seasoned Schemer continues where the Little Schemer left off introducing local variables via let and it's variations including letrec. Set!, the syntax for changing a variables value is introduced. Continuations, as used for escaping from an computation and for going back to previous position in code are also introduced. There are less references to the accomplishments of famous computer scientists in this book than in the Little Schemer which I found to be disappointing. However, I greatly enjoyed this book and would recommend it to anyone wanting to increase their understanding of the Scheme programming language. Although scheme's vector data type is not introduced, I think you will have enough of an understanding of Scheme after reading this book to make substantial programs.

I've put this book #8 in my Top 100 Programming, Computer and Science books list:http://www.catonmat.net/blog/top-100-books-part-two/The Seasoned Schemer is continuation of The Little Schemer that I listed as my #4 favorite book in the first part of this series. This book is written in the same style as The Little Schemer and it's extremely fun to read. It's a dialogue between you and the authors but unlike The Little Schemer that teaches you to think recursively this book teaches you to think about the nature of computation. You'll learn about closures, continuations and continuation passing style (cps), y-combinator and implement your own Lisp in Lisp at the end.

Dialogue style makes this book fun to read. Leitmotif of food examples keeps the tone light and the reader hungry. Have the number for pizza handy before you sit down for this book. Focuses on the use of functions in scheme, in an easy reading, enjoyable style. My only minor criticism is that the typographic conventions make the code hard to read. I realize that they serve a purpose, but it made the typesetting ugly. An admirable work, suitable for reading even if you already "know it all", just because of its approach to teaching.

This is the second book, going more in depth with the language. Mandatory for everyone that wants to learn Scheme

Silence! stir not! for a whisperWould affright thy pretty prey;Not a motion, little lisper,Else the fish will

glide away.

The Seasoned Schemer (MIT Press) The Little Schemer - 4th Edition Rhyme Schemer The Salt Plate Cookbook: Recipes for Quick, Easy, and Perfectly Seasoned Meals The Seasoned Life: Food, Family, Faith, and the Joy of Eating Well Antiquing Secrets: Fastest Way To Discover Antique History & Learn How To Collect Antiques Like A Seasoned Veteran Sex and the Seasoned Woman: Pursuing the Passionate Life 101 Things I Learned in Architecture School (MIT Press) Toward A Minor Architecture (MIT Press) Attunement: Architectural Meaning after the Crisis of Modern Science (MIT Press) What Is Landscape? (MIT Press) White City, Black City: Architecture and War in Tel Aviv and Jaffa (MIT Press) Collage City (MIT Press) The Power of Place: Urban Landscapes as Public History (MIT Press) The New Science of Cities (MIT Press) Design Meets Disability (MIT Press) Speculative Everything: Design, Fiction, and Social Dreaming (MIT Press) Inventing Marcel Duchamp: The Dynamics of Portraiture (MIT Press) VARIOUS SMALL BOOKS: Referencing Various Small Books by Ed Ruscha (MIT Press) The Originality of the Avant-Garde and Other Modernist Myths (MIT Press)