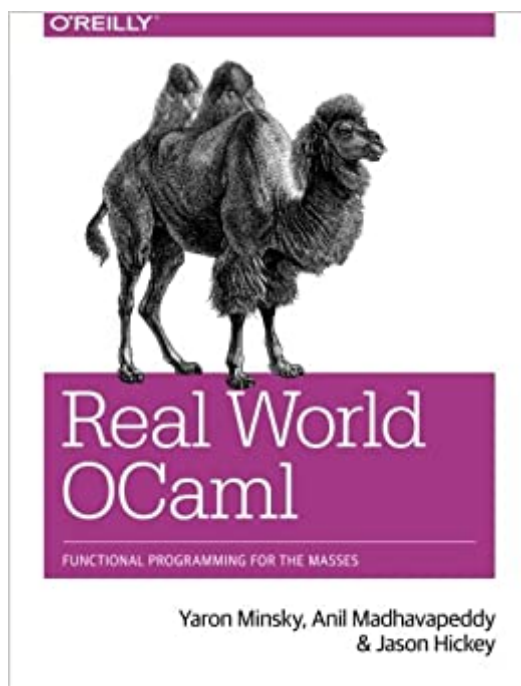


The book was found

# Real World OCaml: Functional Programming For The Masses



## Synopsis

This fast-moving tutorial introduces you to OCaml, an industrial-strength programming language designed for expressiveness, safety, and speed. Through the book's many examples, you'll quickly learn how OCaml stands out as a tool for writing fast, succinct, and readable systems code. Real World OCaml takes you through the concepts of the language at a brisk pace, and then helps you explore the tools and techniques that make OCaml an effective and practical tool. In the book's third section, you'll delve deep into the details of the compiler toolchain and OCaml's simple and efficient runtime system. Learn the foundations of the language, such as higher-order functions, algebraic data types, and modules. Explore advanced features such as functors, first-class modules, and objects. Leverage Core, a comprehensive general-purpose standard library for OCaml. Design effective and reusable libraries, making the most of OCaml's approach to abstraction and modularity. Tackle practical programming problems from command-line parsing to asynchronous network programming. Examine profiling and interactive debugging techniques with tools such as GNU gdb.

## Book Information

Paperback: 510 pages

Publisher: O'Reilly Media; 1 edition (November 25, 2013)

Language: English

ISBN-10: 144932391X

ISBN-13: 978-1449323912

Product Dimensions: 7 x 1 x 9.2 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: 3.8 out of 5 stars 14 customer reviews

Best Sellers Rank: #283,482 in Books (See Top 100 in Books) #19 in Books > Computers &

Technology > Programming > Functional #58 in Books > Computers & Technology >

Programming > Software Design, Testing & Engineering > Tools #120 in Books > Textbooks >

Computer Science > Object-Oriented Software Design

## Customer Reviews

Real World OCaml: Functional programming for the masses  
Camelus bactrianus What's the animal featured on the cover? The animal on the cover of Real World OCaml is the Bactrian camel (Camelus bactrianus). The Bactrian camel, one of two species of camel, is native to Central Asia and has been used domestically in the area for thousands of years. Even though there are over two

million domesticated Bactrian camels, only about a thousand are considered wild. The Bactrian camel is a large animal at 6 to 7.5 feet in height and 7.4 to 11.5 feet in length. An adult will typically weigh between 660 and 2,200 pounds. The Bactrian camel is distinctive for its two large humps on their back, hefty woolly coat, and dark brown color. It is a herbivore that will eat all kinds of vegetation, though they have been known to feed on dead animals. Humans have domesticated the Bactrian camel for travel purposes because of its great natural resiliency. For example, the Bactrian camel can thrive in habitats of both extreme cold and heat. It can also go without water for months and when water is available it can consume up to 55 litres. The cover image is from Meyers Kleines Lexicon. The cover fonts are URW Typewriter and Guardian Sans. The text font is Adobe Minion Pro; the heading font is Adobe Myriad Condensed; and the code font is Dalton Maag's Ubuntu Mono.

## Functional programming for the masses

With the scarcity of high quality OCaml books, this was a welcome addition to my collection. I would recommend this title to anyone interested in OCaml or functional programming.

I struggle to express how much I enjoyed this text. Go read the table of contents to get a glimpse of what it promises. Go read the book and it will deliver. You go from "3 + 4" to the runtime system and the compiler in 500 pages and it makes sense the entire way. There is no filler content here, only clear text accompanied by excellent examples. The presentation is refreshing: here's a concept, here's an example, here's a practical problem with this code, here's how the language solves this problem, in practice there is this and that tradeoff. I wish more books were written like this. While I can't think of a better way to learn OCaml and to explore its ecosystem, I suspect that the pace might be overwhelming for a total beginner. However, considering the value per page that I've gotten from this book, I welcome the tradeoff. Buy it!

This is a great book, the level of detail it provides is fundamental to understand the OCaml language. Functional Programming is an interesting paradigm, and as internet will evolve in the future, we'll for sure see languages like OCaml, Erlang or Haskell taking more relevance into the programming scene given the scalability and power they have to offer. Damian Martinez Murguia

Hint that OCaml's type system can act as a refactoring tool is Real World  $\hat{A}$ -grade one.

Beginners in OCaml will probably want to peruse *Whittington* first--<sup>^</sup> OCaml from the Very Beginning<sup>^</sup> before buying this wonderful text. The format is a fast paced "tutorial" covering all the major, including advanced, functions of OCaml. I'm an old Lisp and current Haskell programmer, and this book really opened my eyes about OCaml beyond academia. Google's using it for systems, big data and domain projects. One of the authors uses it as the main engine for a trading platform. In short, this fascinating hybrid is finding many more applications beyond software engineering education. And like other functionals, its math abilities are awesome. The text has O'reilly's quality and the code, even for a brand new work, is nearly flawless. I was frankly unfamiliar with Core, the largest OCaml library, which is why I have preferred the Haskell community, APIs, libraries and SDKs for a long time. No longer! I'm a functional programmer at heart, but to survive today you have to pick up Java, C#, Python, etc. Amazingly (to me, you probably knew this), OCaml has a very cool "imperative" engine in addition to its native functional design. The authors get right into opening Core first as if you were laying an SDK or IDE foundation with that library-- meaning you don't have to spend hours on the web before trying the hundreds of examples. The "dual nature" or hybrid (imperative and functional) also means you can pick a seminal topic like recursion, for example, and build a loop function just like you would in Haskell. OR, in addition to native functional recursion, you can also use an imperative loop structure such as FOR or WHILE. I compared a FOR imperative with a Sudoku solving functional recursion loop I use all the time (`# let rec find _first_stutter list=` etc.), and the imperative beat the functional by almost 10 seconds for a very difficult trial. This is amazing not due to my poor functional skills, but due to the fact that my functional skills far outweigh imperative-- OC is a lot more forgiving than I imagined even in imperative! Very honestly if a young student was interested in functional, I'd recommend Haskell due mostly to the online community and many fine and growing libraries. This awesome gem of a text changes my mind about that. In nearly 500 pages, the authors convincingly show real world example after example-- including MANY from standard coding interviews-- that prove OC is all grown up far beyond Domain Specific Language and academic applications. Big data is now trending heavy stats too, and OC makes R unnecessary due to its many native calc abilities. I've also heard that is using it in new Web x.o apps, and if I click on Pizza, and my doorbell rings 10 seconds later, OCaml will now be on my suspect list after reading this text. The book is a true triple threat, as a reference, teaching guide/text, and especially as an autodidactic self tutorial even for those with basic beginning skills. OC even has its own parsing generators (akin to lex/yacc/bison etc.) that are smoking even if you don't write compilers, but deal a lot with strings and lists. I've read that big data folk all over the industry (including

Facebook and Twitter) are using OC more and more, and this fine text taught me why. I got both the print and Kindle versions and prefer the print. Kindle isn't as badly slaughtered in code examples (real, not just pseudo) as some e readers, but function arguments in this language are more like UNIX than C#, and spacing matters, so consider that if you're planning on using the kindle code as written. Of course O'reilly is renowned for web support and virtually all the examples are online without the onerous "don't ever use this" statements of a lot of publishers. Highly recommended as a second text after Whittington if you're new to functional, or a first text if you're at least intermediate at Haskell or an imperative, and are ready to explore a really cool new alternative. JOB TIP: Since so many tasty companies are getting into this now, I'm thinking you might be able to distinguish yourself as a programming candidate if you learn this language, separating you from the herd! I'm not thinking many folk have figured this out yet, so go for it, and God love you! I'm too old to look through that lens, but hope it helps some of you young geniuses.

great!

It is probably the first language I gave up on understanding fully. Maybe it is me, maybe it is a book -- my main complain is not sufficient explanation of OCaml features. The authors use an odd pattern of explaining, they start with picking up some analogies to more mainstream languages (good), then they say it does not work that way in OCaml (ok), and they end up with quick definition and example. Take for example p.212, what is an object in Ocaml. Entire paragraph goes what object is NOT, and then just a single liner what object is (I didn't manage to get firm, solid understanding from that) with following example. Why not do the obvious (?) thing and write positive analogy -- something like "think of X in Ocaml as Y limited to Z in Java" -- is a mystery for me. For the record, the core language parts takes 249 pages, I lost contact at 175. At this point I rated this book 3/5 -- simply OK. The next part is devoted to using OCaml, I wasn't interested in this (and I lacked the language skills), so I just glanced over it quickly, and then a pleasant surprise -- 100 pages about OCaml internals. I paid special attention to handling numeric values, because sadly entire book *Ruby Under a Microscope: An Illustrated Guide to Ruby Internals* lacks that interesting (and smart) piece. Of course there is more than just this, so I am very happy authors decided to add this III part. On technical side I didn't find anything especially bad with small exception. Regular text is correctly adjusted and divided, but when the last word in the line comes from the code it is divided without a hyphen. It makes reading harder, you see for example (p.181) "but because Inter". And you think "what? what Inter"? And then you continue reading next line "val.t. is not ...", ok,

"Interval.t". So my rating 4/5 is maybe not entirely "I like it", rather still "OK" with addition "I really appreciate the internals addition". If you are not interested in internals, read it as 3/5.

[Download to continue reading...](#)

Real World OCaml: Functional programming for the masses Python Programming: Python Programming for Beginners, Python Programming for Intermediates, Python Programming for Advanced C++: The Ultimate Crash Course to Learning the Basics of C++ (C programming, C++ in easy steps, C++ programming, Start coding today) (CSS,C Programming, ... Programming,PHP, Coding, Java Book 1) Functional Programming in JavaScript: How to improve your JavaScript programs using functional techniques The Real Book of Real Estate: Real Experts. Real Stories. Real Life. Hawaii Real Estate Wholesaling Residential Real Estate Investor & Commercial Real Estate Investing: Learn to Buy Real Estate Finance Hawaii Homes & Find Wholesale Real Estate Houses in Hawaii C++ and Python Programming: 2 Manuscript Bundle: Introductory Beginners Guide to Learn C++ Programming and Python Programming C++ and Python Programming 2 Bundle Manuscript. Introductory Beginners Guide to Learn C++ Programming and Python Programming Python Programming: The Complete Step By Step Guide to Master Python Programming and Start Coding Today! (Computer Programming Book 4) The Smart Real Estate Investor: Real Estate Book Bundle 2 Manuscripts Expert Strategies on Real Estate Investing, Starting with Little or No Money, Proven Methods for Investing in Real Estate The Smart Real Estate Investor: Real Estate Book Bundle 3 Manuscripts Expert Strategies on Real Estate Investing, Finding and Generating Leads, Funding, Proven Methods for Investing in Real Estate Real Estate: 25 Best Strategies for Real Estate Investing, Home Buying and Flipping Houses (Real Estate, Real Estate Investing, home buying, flipping houses, ... income, investing, entrepreneurship) Real Estate: 30 Best Strategies to Prosper in Real Estate - Real Estate Investing, Financing & Cash Flow (Real Estate Investing, Flipping Houses, Brokers, Foreclosure) Wheater's Functional Histology: A Text and Colour Atlas, 6e (FUNCTIONAL HISTOLOGY (WHEATER'S)) Wheater's Functional Histology: A Text and Colour Atlas (Book with CD-ROM) (Functional Histology (Wheater's)) Patai's 1992 Guide to the Chemistry of Functional Groups (Patai's Chemistry of Functional Groups) The Chemistry of Double-Bonded Functional Groups, Supplement A3, 2 Part Set (Patai's Chemistry of Functional Groups) Nolte's The Human Brain: An Introduction to its Functional Anatomy With STUDENT CONSULT Online Access, 6e (Human Brain: An Introduction to Its Functional Anatomy (Nolt) Textbook of Clinical Nutrition and Functional Medicine, Vol. 1: Essential Knowledge for Safe Action and Effective Treatment (Inflammation Mastery & Functional Inflammology) Textbook of Clinical Nutrition and Functional Medicine, Vol. 2: Protocols for Common Inflammatory Disorders

(Inflammation Mastery & Functional Inflammation)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)