A Book Proposal about a C Compiler

Dear Sir or Madam,

I have written a book about compiler construction that I hope you are interested in publishing (I enclose the script in PDF format), I have also sent a proposal of a Windows book in a separate mail. More specifically, the book describes a C compiler written in Java generating executable code for the Intel x86 architecture. All source code given in the book, the source code is also available as a NetBeans project.

The book describes every part of the compiler: the preprocessor, scanner and parser, symbol table and type system, middle code generator and optimizer, target code generator and register allocator as well as the linker and standard library. The input of the compiler is a set of source or object files and the output is an executable file.

Opposite to some books, this book does not include a large set of small examples. Instead, it goes through the different parts of a real compiler. Opposite to some other books, this book does not deal with a small compiler generating a toy language to a toy architecture. The source code is real C, in accordance with the ANSI standard, and the generated code is real executable machine code.

I have worked hard with the compiler, in order for its code to be as correct, clear, and understandable as possible. Even though there are still some minor features to address, I would say that the compiler is more or less finished. The text of the book that describes the compiler, however, may need some more work. Naturally, I also want the text to be as clear and understandable as possible. I plan to continue to work on the text.

Maybe you receive a lot of vague and optimistic ideas for books. In this case, however, the compiler has already been constructed and the first draft of the book has already been written.

When it comes to competition there are classic books about complier construction. However, as I see it, they do not compete with my book. They describe the basic features of compiler construction and to some extent advanced features. The structures of these books are similar to mine, it is fair to say that I have been inspired by these books. However, while they give a large number of small examples, my book describes in each chapter the features necessary to be included in a C compiler.

[A. V. Aho](http://www.bokus.com/cgi-bin/product_search.cgi?authors=Alfred%20V%20Aho) et al. Compilers – Principles, Techniques, and Tools, 2nd edition. [Prentice Hall](http://www.bokus.com/cgi-bin/product_search.cgi?publisher=Prentice%20Hall), 2006.

[K. Cooper](http://www.bokus.com/cgi-bin/product_search.cgi?authors=Keith%20Cooper), L. Torczon. Engineering a Compiler, 2nd edition. Morgan Kaufman, 2011.

[C. N. Fischer](http://www.bokus.com/cgi-bin/product_search.cgi?authors=Charles%20N%20Fischer) et al. Crafting a Compiler. [Pearson Education](http://www.bokus.com/cgi-bin/product_search.cgi?publisher=Pearson%20Education), 2009.

[A. W. Appel](http://www.bokus.com/cgi-bin/product_search.cgi?authors=Andrew%20W%20Appel). Modern Compiler Implementation in Java, 2nd edition. [Cambridge University Press](http://www.bokus.com/cgi-bin/product_search.cgi?publisher=Cambridge%20University%20Press), 2002.

The following book could be said to be more closely related to mine, as it also described the code for a C compiler. However, it is outdated and leave out some crucial details. And to be honest, I consider this book to be unreadable.

C. W. Fraser, D. R. Hanson. A Retargetable C Compiler : Design and Implementation. Benjamin Cummings, 1995.

This books deals with the more advanced parts of compiler construction; that is, compiler optimization. Even though I have included some optimization techniques in my book, it does not compete with this book.

[S. S. Muchnick](http://www.bokus.com/cgi-bin/product_search.cgi?authors=Steven%20Muchnick). Advanced Compiler Design & Implementation. [Morgan Kaufmann](http://www.bokus.com/cgi-bin/product_search.cgi?publisher=MORGAN%20KAUFMANN), 2003.

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